LAW AND CONTEMPORARY PROBLEMS

HOUSING

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HOUSING

PROFESSOR E. R. LATTY, *Special Editor*

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FOREWORD

In publishing this symposium on Housing in January, 1947, *Law and Contemporary Problems* presents various aspects of law bearing on a contemporary problem of crisis proportions. The setting of law, present or potential, adequate or inadequate, against which the problem is posed affords challenging angles for exploration. However, the exploration undertaken in the pages that follow is not limited to the legal phase, for this is but a complement to the economic, sociological, political and technological phases characteristic of the current housing problem.

The first article, by Messrs. Hauser and Jaffe of the Bureau of the Census, on "The Extent of the Housing Shortage," in addition to presenting statistical information, analyzes the population and housing factors and their interrelationship in the housing shortage. The statistical theme is continued and expanded in the closing article entitled "The Housing Crisis in a Free Economy" which, from one point of view of logical sequence, might well be read together with the opening article.

The second article, by Mr. Robert L. Davison of the housing research organization which bears his name, discusses "Technological Potentials in Home Construction"; he reminds us that potentialities in housing technology cannot be realized unless our thinking of "home" undergoes as drastic a reorientation as the change in thinking from animal husbandry to mechanics with the mass utilization of the automobile.

As a preliminary to the subsequent group of articles tinged with legal content, a short comment by Mr. Miles L. Colean on "Changing Attitudes Toward Property Ownership and Mortgage Finance" carries implications which may well be reflected in legislation of the future.

The fourth article, by Shirley Adelson Siegel shows some of the actual results of the changing attitudes observed by Mr. Colean; her article on "Real Property Law and Mass Housing Needs" depicts the evolution in judicial decision and legislation that accompanied changing views on the role of the State and describes some of the legal problems in redevelopment projects.

The title of the fifth article, "Handicraft and Handcuffs—The Anatomy of An Industry," by Lee Loevinger, gives a clue to his analysis of the factors that make for prohibitive housing costs—particularly, restrictive practices by labor, industry and finance. He points out the legal doctrines bearing on these practices, including antitrust law. Continuing the exploration of restrictive practices outlined generally in

the above article, the sixth article, by Professor Corwin D. Edwards, puts the spotlight on the specific operation of one statute-based device: in "Legal Requirements that Building Contractors Be Licensed," he shows the uses and abuses of which some pressure-sponsored legislation is susceptible.

An admixture of legal, technological and political considerations is the ensuing article, "The Problem of Building Code Improvement," by George N. Thompson of the Naitonal Bureau of Standards. The author surveys the efforts, too frequently belittled, that constantly seek modernization and standardization of municipal building codes.

The following article, entitled "Administration—Legal Methodologies in Elimination of Sub-Standard Housing," by Professor Spencer Parratt, serves as a constant reminder that as increasing social demands enlarge governmental activity, ever greater is the role of those rules of law that seek a proper balance between effective governmental power and fair play; the practical lessons from those rules provide Professor Parratt's subject.

Of particular value to the lawyer who may be consulted by aspirants planning co-operative apartment ownership is the ninth article, "Some Legal Aspects of Co-operative Apartments," in which Mr. Edwin Yourman compares various forms of organization available in our legal system, with their advantages and drawbacks, including the taxation angle.

The tenth article, by Mr. William Remington, economist, is devoted to an analysis of the aims, techniques and operation of the Government's "Veterans Emergency Housing Program." While the swift march of events since galley-proof has materially affected a good deal of Mr. Remington's discussion, value still remains in his exposition of the problems and characteristics of the Government's housing program.

"Legislative Proposals," by Mr. Philip H. Hill presents a study of the movement in Congressional circles to meet the challenge of present-day housing needs, with particular reference to the provisions of the Wagner-Ellender-Taft Bill.

The concluding article, by Messrs. Newcomb and Kyle of the Federal Housing Agency, under the title "The Housing Crisis in a Free Economy," is a careful statistical study of the probable demands upon the construction industry under alternative assumptions of price and income levels. The market potential envisaged by the authors merits careful attention from the building industry.

E. R. LATTY.

THE EXTENT OF THE HOUSING SHORTAGE

P. M. HAUSER* AND A. J. JAFFE†

War has always left in its wake grave problems of economic and social adjustment. World War II required an unprecedented mobilization of the nation's human and material resources to meet the total war effort of our enemies and has left unprecedented problems of economic and social reconversion. Among the most acute of these problems is that relating to housing.

The acute housing problem which faces us today, however, is more than a heritage of the war alone. It is also, in part, a product of the great dislocation resulting from almost a decade of depression which preceded the war. The cumulative effect of these catastrophic forces is evident in the extent of the current housing shortage.

Measuring the extent of the housing shortage is not as simple a problem as may seem upon first consideration. It is a task beset by a number of difficulties of both an economic and social character. To begin with, an analysis of the supply of housing relative to effective demand would produce quite different results than would an analysis in respect to social need. Moreover, in a transitional period, such as the present, complicated by rising prices, material shortages, temporary housing, production bottlenecks, and the changing aggregate and distribution of income payments, both the supply and the demand schedules for housing are particularly difficult to quantify. Any attempt to measure the social need for housing is handicapped by the lack of any widely accepted objective standards of either need for, or quality of, housing units. Another difficulty in dealing with this problem arises from the fact that most of the information available on a current basis is restricted to national data. Since the population is highly mobile while housing is immobile, and since both the war and the depression produced great population shifts, the national picture tends to obscure the problem as it actually exists in the specific local community.

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This paper is not written in the official capacity of the authors and is not to be interpreted as representing official estimates of the Bureau of the Census or the Department of Commerce.

The authors wish to express their thanks to Mr. Samuel J. Dennis, Chief, Construction Economics Unit, Construction Division, U. S. Dept. of Commerce, for his aid and advice in the preparation of this paper.

For purposes of this paper, we shall not attempt to deal with the supply of housing in relation to effective demand; we shall rather focus on the problem of supply in relation to the needs of the population. Let us turn first to a consideration of some basic population data in the light of which some evaluation of the need for housing can be undertaken.

THE POPULATION FACTOR

Families. Houses are built for people. The clusterings of people and the form of residential structures, take many forms in the United States today. The United States Census provides information not only on the total number of persons but also on the number of "families." The census "family," however, is not the family as commonly recognized; it is rather a convenient administrative unit for purposes of canvassing the population. In essence, the census "family" is a group of persons related or unrelated who live together and share common housekeeping arrangements. Included in this concept are single persons living alone in a housing unit and groups of unrelated persons living in common quarters such as a rooming house but not including institutions.[1] Thus, the census "family" may include more than one family in the commonly accepted definition of the term. A husband and wife with or without children living with the wife's parents, for example, although a separate family unit, would be counted as part of one family in the census returns. For purposes of clarity we shall refer to the family in common usage as the "social family"[2] as distinguished from the "census family" described above.

The social family for purposes of housing can be classified into two different types. The first—the "normal family" consisting of the male head living with his wife with or without children and with or without other persons (the other persons, by definition, of course, never include a husband and wife living together). The second—"all other types"—which include various forms of "broken families" and combinations of related and unrelated persons, other than a married couple living together.

Thus, on July 1, 1940, there were approximately 35.1 millions of census families; these census families included 37.5 million social families of which 29 million were normal social families and 8.5 millions were other social families.

[1] By census definition a "private family" comprises a family head and all other persons in the home who are related to the head by blood, marriage, or adoption, and who live together and share common housekeeping arrangements. A person living alone is counted as a one person private family. A family head sharing his living accommodations with one or more unrelated persons, or providing rooms for the use of lodgers, servants, or hired hands is also counted as a one person private family. A group of related persons residing permanently or for an indefinite period in an apartment hotel is counted as a private family.

The term "private household" is used in the 1940 population census to include the related family members (who constitute the "private family") and the lodgers, servants, and hired hands, if any, who regularly live in the home. Thus the number of private households is the same as the number of private families, but the total number of persons in private households includes some individuals who are not members of "private families." U. S. BUR. OF THE CENSUS, THE SIXTEENTH CENSUS OF THE UNITED STATES 1940—POPULATION AND HOUSING—"FAMILIES—GENERAL CHARACTERISTICS" (1943) 2.

[2] The "social family" is the equivalent of the "census family" plus the census sub-families. For definition of sub-family, see *op. cit. supra* note 1, at 4-5.

Rates of Population vs. Family Growth. The number of families in the United States has been increasing at a much more rapid rate than has the total population. This seeming paradox (see Table 1) is accounted for by the declining birth rate

TABLE 1. POPULATION AND NUMBER OF FAMILIES, UNITED STATES, 1890 TO 1945.

Year	Population (in thousands)	Census families (in thousands)	Persons per family	Average annual percentage change since preceding census	
				Population	Census families
1945	139,621	37,500	3.7	1.2	1.5
1940	131,669	34,949	3.8	.7	1.7
1930	122,775	29,905	4.1	1.6	2.3
1920	105,711	24,352	4.3	1.5	2.0
1910	91,972	20,256	4.5	2.1	2.7
1900	75,995	15,964	4.8	2.1	2.6
1890	62,948	12,690	4.9	—	—

SOURCE: Data for 1890 to 1940 from U. S. BUR. OF THE CENSUS, STATISTICAL ABSTRACT OF THE UNITED STATES, 1944-45, tables 4 and 44. Population data for July 1, 1945 from Bureau of the Census release, *Population* series P-46, No. 6, July 10, 1946; number of families for July 1, 1945 from *Population*—special reports, series P-46, No. 4, June 1, 1946.

which has resulted in smaller family size and in the aging of the population so as to produce larger proportions of persons of marriageable age. Thus, although the average annual rates of growth of population for the decades 1910-20 and 1920-30 respectively were 1.5 and 1.6 percent, the comparable average annual rates of growth of families were respectively 2.0 and 2.3 percent. During the depression years of the 30's the average annual rate of population growth declined to .7 while that of families dropped only to 1.7. In the war period—1940 to 1945—the rate of population growth rose to 1.2 as a result of the wartime boom in births; the rate of family growth on the other hand declined to 1.5.

These data, while they show that the need for new housing as measured by the number of families is not declining at the same rate as the decline in total population growth, do not tell the whole story. The decline in the rate of growth of census families for example, from the depression years of the 30's to the war years in the first half of the 40's, as a result of census definitions largely reflect the failure of new social families to establish separate household units, or the enforced doubling up of social families in areas of housing shortage.

The need for housing units is more accurately indicated by the number of social families. The number of social families increased at an average annual rate of 2 percent between 1940 and 1945 as contrasted with 1.5 percent for census families. The estimated number of census families by single years from 1930 through 1945 and by 5 year periods from 1945 to 1960, together with the estimated number of social families by type, 1930 to 1945, is shown in the following Table 2.

Family Formation. The growth in the number of normal social families is the net effect of new families added by marriage and established families broken by death and divorce. The rate of net family formation and of its components is a function of a number of variables including factors such as the age and sex com-

TABLE 2. ESTIMATED NUMBERS OF CENSUS FAMILIES, SOCIAL FAMILIES, AND DWELLING UNITS, UNITED STATES, 1930 TO 1960.
(numbers in millions)

July 1	Estimated No. Census Families	Estimated Number Social Families			Estimated No. Existing Dwelling Units
		Total	Normal	Other	
1960	44.8	....	....	...	....
1955	42.9	....	....	...	....
1950	40.9	....	....	...	....
1945	37.5	41.3	31.8	9.5	40.4
1944	37.1	40.8	31.5	9.3	40.1
1943	36.9	40.2	31.1	9.1	39.8
1942	36.5	39.4	30.4	9.0	39.1
1941	35.9	38.4	29.7	8.7	38.2
1940	35.1	37.5	29.0	8.5	37.3
1939	34.2	36.7	28.4	8.3	36.4
1938	33.5	36.0	28.0	8.1	35.7
1937	32.9	35.4	27.5	7.9	35.2
1936	32.3	34.7	27.0	7.7	34.7
1935	31.8	34.0	26.5	7.5	34.2
1934	31.2	33.3	26.0	7.3	34.0
1933	30.7	32.7	25.6	7.1	33.8
1932	30.4	32.2	25.3	6.9	33.6
1931	30.2	31.8	25.0	6.7	33.2
1930	29.9	31.3	24.7	6.6	32.7

SOURCE: Estimated number of census families 1931 to 1939 derived from data presented in research memorandum prepared by Division of Research and Statistics, Bureau of Foreign and Domestic Commerce, June 1943 (with subsequent revisions). Data for 1941 and later years from Paul C. Glick, *op. cit. infra* footnote 14. Estimated number of existing dwelling units, 1930 to 1939 and 1941 to 1944 from BFDC research memo referred to above. All other periods derived from U. S. Bureau of the Census data. For sources of data on social families see note Table 3. For the years 1940 to 1945 the normal families include the families of members of the Armed Forces, even though the husbands were absent from home.

position of the population, trends in mortality, changing social attitudes, changing laws, and the business cycle. In addition to these factors there is of course, the major impact of the disruptive forces of war.

Even cursory analysis of the rate of family formation for the years 1930 to 1945 (see Table 3) indicates not only the wide fluctuation of this rate but, also, its correlation with the various stages of the business cycle and of the war. During this period, the rate of family formation dropped to a low point of 9.1 (per 1,000 existing families) in the heart of the depression in 1932, and rose to a peacetime high for this period of 22.8 in 1940. The combination of boom prosperity and psychological and social factors associated with the passage of the Selective Service Act and mobilization pushed the rate of family formation to 24.8 in 1941 and to a high point of 25.3 in 1942. With the large expeditionary forces abroad in 1943 and 1944 the formation of new families dropped precipitously to 15.1 and 10.0 respectively. The end of the war and demobilization of the armed services resulted in an increase in formation of new families as indicated by the rate of 11.7 in 1945.

During the period of depression the decline in the rate of family formation was due mainly to the drop in the number of marriages which more than offset the decrease in divorces and the drop in the death rate. The increase in family formation with economic recovery reflects largely the increase in the marriage rate, which again more than offset the increase in divorces and deaths. The wartime boom in

TABLE 3. ESTIMATED RATE OF FAMILY FORMATION, UNITED STATES, 1930 TO 1945.
(numbers in thousands)

Year	Estimate No. of normal families on Jan. 1	Estimated number broken by			Estimated No. added by marriages	Net addition	Estimated No. of normal families July 1	Rate of family formation, per 1,000 normal families
		Total	Death	Divorce				
1945.....	31,609	1,247	745	502	1,618	371	31,795	11.7
1944.....	31,294	1,137	737	400	1,452	315	31,452	10.0
1943.....	30,824	1,107	748	359	1,577	470	31,059	15.1
1942.....	30,053	1,001	680	321	1,772	771	30,439	25.3
1941.....	29,318	961	668	293	1,696	735	29,686	24.8
1940.....	28,657	935	671	264	1,596	661	28,988	22.8
1939.....	28,179	926	675	251	1,404	478	28,418	16.8
1938.....	27,727	879	635	244	1,331	452	27,953	16.2
1937.....	27,190	914	665	249	1,451	537	27,458	19.6
1936.....	26,727	906	670	236	1,369	463	26,959	17.2
1935.....	26,236	836	618	218	1,327	491	26,482	18.5
1934.....	25,757	823	619	204	1,302	479	25,997	18.4
1933.....	25,411	752	587	165	1,098	346	25,584	13.5
1932.....	25,182	753	593	160	982	229	25,297	9.1
1931.....	24,902	781	597	184	1,061	280	25,042	11.2
1930.....	24,566	791	599	192	1,127	336	24,734	13.6

SOURCE: Estimated on the basis of U. S. Census data presenting: number of married persons, spouse present; age of husband by age of wife; mortality tables. Also, U. S. Public Health Service data on numbers of marriages and divorces and annual fluctuations in the death rate.

family formation was associated, of course, with the phenomenal rise in the marriage rate despite the rising divorce and death rates. The relatively small increase in the rate of family formation in 1945, despite the large increase in the number of marriages, was occasioned by the unusually high divorce and death rates which resulted in broken families.

The total number of census families in the United States increased from 29.9 millions in 1930 to 37.5 millions in 1945, or by 7.6 millions. The number of social families, however, is estimated to have increased during this interval from 31.3 millions to 41.3 millions, or by 10 million units. The normal social families increased from 24.7 to 31.8 millions, or by 7.1 millions; while the category "other social families" rose from 6.6 to an estimated 9.5 millions. The annual changes in the total numbers of families, reflects, of course, the irregularity in the rate of family formation.

Births. The need for new housing although indicated by the rate of family formation is also affected by other important factors. Chief among them is perhaps the pressures created by the addition of children to a family. The birth rate is a factor which must be considered in any attempt to estimate the need for *specific* types of housing in terms of numbers of, size of, and quality of units.

The birth rate also is a function of a number of social and economic variables and has been markedly affected by the periods of depression and war under consideration (see Table 4). The birth rate dropped sharply with the downward swing in the business cycle, rose with recovery, and reached high points for this period during the early war years. Births decreased during the period in which we had

TABLE 4. NUMBER OF BIRTHS AND BIRTH RATES, UNITED STATES, 1930 TO 1945.

Year	Reported number of births (in millions)	Birth Rate Per 1,000 Population		Year	Reported number of births (in millions)	Birth Rate Per 1,000 Population	
		Reported	Adjusted[1]			Reported	Adjusted[1]
1945	2.74	19.8	21.1	1937	2.20	17.1	18.7
1944	2.79	20.2	21.5	1936	2.14	16.7	18.4
1943	2.93	21.5	22.9	1935	2.16	16.9	18.7
1942	2.81	21.0	22.3	1934	2.17	17.2	19.0
1941	2.51	18.9	20.3	1933	2.08	16.6	18.4
1940	2.36	17.9	19.4	1932	2.18	17.4	19.2
1939	2.27	17.3	18.8	1931	2.23	18.0	19.9
1938	2.29	17.6	19.2	1930	2.33	18.9	20.9

[1]Adjusted for under-reporting of births.
SOURCE: Derived from data presented in "Estimating Completeness of Birth Registration in the United States, 1935-1944," Vital Statistics Special Report, Vol. 23, No. 9, Oct. 1946, National Office of Vital Statistics, U. S. Public Health Service.

large expeditionary forces abroad and at the present time are again increasing as a result of demobilization.

In general the birth rate, with a lag of somewhat less than one year, is fairly highly correlated with the marriage rate and thus, also, to a considerable extent with the rate of family formation. The combined influence of the depression and war which resulted in a great peaking of family formation and births since 1940 are no small factors in the acuteness of the current housing problem.

THE HOUSING FACTOR

The Dwelling Unit. Housing in the United States takes many forms in respect both to structure and quality. American families are housed in structures ranging from the one room wooden shack to the palatial mansion, from the single family unit to the mammouth apartment house structure, and from the purely residential unit to the mixed structure which includes not only residences but also forms of business or industry.

Most of the information available on the number and characteristics of American housing come from the only complete census of housing ever taken in this country—the 1940 Census of Housing taken in conjunction with the 16th Decennial Census of the United States. In taking the housing census, units occupied by institutional populations such as are found in military installations, penal institutions, etc., were excluded from the enumeration.[3] The census distinguished between the structure and the dwelling unit and excluded from its count all structures which did not contain residential dwelling units. The residential structure is "a building which contains one or more dwelling units." Occupied and vacant dwelling units were counted in the housing enumeration. The occupied dwelling unit as used in the 1940 housing census is defined, "as the living quarters occupied by one household."[4]

[3] U. S. BUR. OF THE CENSUS, SIXTEENTH CENSUS OF THE UNITED STATES: 1940, HOUSING, Vol. II, part 1 (1943) 2.
[4] See *op. cit. supra* note 1 for source.

The vacant dwelling unit is defined as a unit, vacant at the time of enumeration and either for sale or rent or held for occupancy by an absent household.

On April 1, 1940, there were 37.3 million dwelling units enumerated in the United States of which 34.8 were occupied, 1.9 vacant and for sale or rent, and .6 vacant but not for sale or rent.

Net Addition to Dwelling Units. Although no complete census data are available on the total number of dwelling units except for 1940, estimates have been made by single years from 1930 through 1945. These estimates, although subject to considerable error,[5] illustrate the pattern in the growth of new housing during the depression and the war. The rate of net additions to total dwelling units fell sharply from the level of 15 and 12 net additional units per 1,000 existing units in 1931 and 1932, to the depression low of 6 in the period from 1933 through 1935. The rate of net additions to dwelling units rose sharply with recovery to a level of 14 and 15 per 1,000 units in the years 1936 through 1938. With the impact of the defense and early war production program it reached 20 in 1939, a peak of 25 in 1940, and dropped to 23 by 1942. As a result of material shortages and war priorities the net additional dwelling units dropped to a rate of 18 per 1,000 in 1943, and to near depression lows of 8 and 7 respectively in 1944 and 1945. For the entire period 1930 through 1945 the number of dwelling units in the United States increased by 7.7 millions from 32.7 to 40.4 millions.

Quality of Dwelling Units. Not all of these dwelling units, however, were inhabitable, and those inhabitable varied greatly in quality. Data on the number of units unavailable for habitation are obtainable only for 1940 and 1945.

In November, 1945, the Bureau of the Census conducted a sample survey of dwelling units in the United States which included an enumeration of units not available for habitation. Of the 2 million dwelling units so reported, 1.3 were vacant dwelling units not for sale or rent[6] and .7 millions were deemed uninhabitable. Thus, in 1945 of the 40.4 total existing dwelling units, 38.4 were actually available for family use.

In 1940 the number of dwelling units not available for habitation was approximately 1.0 million of which .6 million were vacant but not for sale or rent and the remainder vacant and unfit for habitation.[7] In 1940, therefore, of the 37.3 millions existing dwelling units, 36.3 were actually available for family occupancy.

Of the dwelling units available for human habitation an appreciable number are of substandard quality and not only indicate social need for additional housing but

[5] The estimate for 1945 is more reliable than that of other non-census-years since it is based on a comprehensive sample of the nation's housing. See U. S. BUR. OF THE CENSUS, HOUSING—special reports, Series H-46 (1946) Nos. 1 and 2.

[6] These include units held for absent households such as summer cottages, units to be demolished, units in litigation, units undergoing extensive repairs, etc.

[7] The concept "vacant and unfit for habitation," is not identical for 1940 and 1945. In 1945 the enumerators were instructed to record as not habitable, "units in need of major repairs where similar units in the same neighborhood are not occupied, as well as units unfit for human habitation" (see *op. cit. supra* note 5, in Series H-46, No. 2). In 1940 vacant units for sale or rent, but classified as in need of major repairs, were considered as "unfit for habitation" for the purposes of this paper.

undoubtedly also affect both the supply and demand schedules for housing. In periods of prosperity the substandard housing of the type existent in both the urban and rural slums of the nation augment the demand for new housing since their occupants attempt to obtain better housing. Once new dwelling units become available the slum housing tends to disappear from the available housing supply because it attracts no new residents. This is particularly true in the present economic climate characterized by a large volume of accumulated savings and a high level of current income payments. Of these two factors the latter is undoubtedly the more important as it affects effective demand for housing among our less advantaged economic groups. As indicated above, no attempt is made in this paper to measure the effects of substandard housing on the housing supply and demand schedules although data are presented to give some approximation of the extent to which such substandard units contribute to the social need for housing.

It is difficult to obtain a clear cut definition of substandard housing but there is some agreement on what constitutes adequate housing.[8] The mass data collected by the Bureau of the Census in which the quality of housing is necessarily based on a combination, in varying degree, of the judgment of the enumerator and the respondent, are subject to considerable error, particularly with respect to individual housing units. Yet the data on quality of housing as reported in the census fall into patterns which indicate that for large areas they are reasonably valid measures of poor or inadequate facilities.

In both the 1940 Census of Housing and the 1945 Sample Survey conducted by the Census Bureau, the enumerator reported the number of dwelling units "in need of major repairs,"[9] and the number with running water and various combinations of toilet and bath facilities. For purposes of this paper two definitions of substandard housing are employed. The first—"a"—in the main that followed by the National Housing Agency[10] includes: in urban areas all dwelling units reported as in need of major repairs plus other dwelling units which do not have both a private bath and flush toilet; in rural areas (including both farm and non-farm areas) all dwelling units in need of major repairs. The second definition—"b"—simply considers all units as described as in need of major repairs as being substandard. These definitions of substandard units obviously are open to debate, but in general they may certainly be taken as at least approximations of the number of units which would fall below acceptable housing standards in accordance with the American standard of living.

In applying the first definition of substandard housing we find that of the 36.3 million housing units available for habitation in 1940, 9.8 millions, or 27 percent, were substandard; in 1945 of the 38.4 million units available for habitation, 7.5, or

[8] SEN. COMMITTEE PRINT No. 8, 79th Cong., 2d Sess. (1946) 3, 4 (Report by Samuel J. Dennis on "Standards for Measuring Housing Needs").

[9] A repair is regarded as major "when its continued neglect will seriously impair the soundness of the structure and create a hazard to its safety as a place of residence," or if "the structure is already unsound." See U. S. BUR. OF THE CENSUS, *op. cit. supra* note 3, at 195.

[10] U. S. NAT. HOUSING AGENCY, HOUSING NEEDS (National Housing Bulletin No. 1, 1944) 15.

20 percent, were substandard. The decline in the number of substandard units between 1940 and 1945 undoubtedly reflects renovations particularly in 1940 and 1941, made possible by the increased income payments in the pre-war and early war boom.

In accordance with the second and more conservative definition of substandard housing, approximately 6.3 million units, or 17 percent, were substandard in 1940; and 4.3 million, or 11 percent, were substandard in 1945. It may be argued that this conservative definition is the more reasonable measure of housing construction needs because the urban dwelling unit without a bath and toilet is not necessarily structurally unsound. But the fact that there is a high correlation between need of major repairs and the absence of toilet and bath would suggest that there is reasonable basis for defense of the broader definition of substandard units.

RELATION OF HOUSING TO POPULATION

The extent of the housing shortage is the difference between the social need for housing and the available housing supply. The extent of the housing shortage will, therefore, obviously differ with variations in the definition of "social need" and "available supply."

The social need for housing can be defined in several ways. It could be described as being measured by the number of census families—that is households including sub-families—in some "normal" period of time. It could, also, be defined as consisting of the total number of social families. Unfortunately adequate data are not available to obtain any norm for doubled-up families, although the data reported in the 1940 census might be used as an estimate of such a norm. The fact that the 1940 census was taken after a long period of depression and in an economic situation characterized by the presence of approximately 8 million unemployed would indicate that these data undoubtedly overstate the number of doubled-up families for purposes of a norm.

In the light of these considerations and in order to present a possible range in estimates the social need for housing will be measured in three ways as follows:

1. The number of social families.
2. The number of census families—that is, households including sub-families in the proportions reported in the 1940 census.
3. The number of census families—that is, households including sub-families, in half the proportion reported in the 1940 census.

The first of these approximations of social need for housing affords the highest estimate and assumes that a dwelling unit should be available for every social family. The second of these measures of social need for housing is the lowest estimate, and assumes the desirability of doubling up in housing to the extent reported in the 1940 census. The third is an intermediate estimate of the social need for housing with the arbitrary assumption that half the doubling up reported in the 1940 Census can be considered as "normal."

The available supply of housing is also defined in three ways:

1. Dwelling units currently occupied, plus dwelling units vacant for sale or rent and fit for habitation.
2. Dwelling units currently occupied, minus "a" substandard dwelling units, plus those vacant for sale or rent and fit for habitation. (See definition "a" above, page 10.)
3. Dwelling units currently occupied minus "b" substandard units, plus those vacant for sale or rent and fit for habitation. (See definition "b" above, page 10.)

The first is the highest estimate of housing supply and assumes that every occupied dwelling unit is fit for continued human habitation. The second is the lowest estimate of housing supply and assumes that dwelling units in need of major repairs in both urban and rural areas and dwelling units without bath and toilet in urban areas are not fit for continued habitation. The third is an intermediate estimate of housing supply and assumes that only dwelling units in need of major repair are not fit for habitation.

The Americans are a highly mobile people in at least two senses which affect the extent of the housing shortage. First, large numbers of our people migrate differentially from one to another geographic area.[11] Second, large numbers of our people change their place of residence within the same geographic area. The continuous turnover in housing occupancy necessitates a minimum number of vacant units which may be described as frictionally vacant units.

The only over-all national data on vacancy in the United States are found in the 1940 Census of Housing, and in the 1945 Sample Survey to which reference was made. In 1940 1.9 millions units or 5 percent of all dwelling units were reported as vacant and for sale or rent. Since it is a widespread practice to consider 5 percent as a "normal vacancy rate"[12] this percentage will be employed as our estimate of necessary frictional vacancy.

Varying estimates of the relation of social need for housing to the available supply of housing based on the assumptions outlined above are presented in Table 5 for the year 1945. This table indicates the number of dwelling units needed under the varying assumptions of social need, with allowance for frictional vacancy as defined above.

The lowest estimate of the extent of the housing shortage in 1945 obtained through this analysis, is thus 2 million units. An intermediate estimate is around 8 million units, and the highest estimate, 12.3 million units.

In the judgment of the writers the lowest estimate involves assumptions so unreal as to be unacceptable; without question it greatly understates the need for housing. On the other hand, the highest estimate of the extent of the housing shortage is subject to the criticism that it does not make adequate allowance for the possibility of renovating and modernizing part of the existing residential facilities. Neverthe-

[11] Shryock, *Internal Migration and the War* (1943) 38 J. AM. STATISTICAL ASS'N 16.
[12] U. S. NAT. HOUSING AGENCY, *op. cit. supra* note 10, at 14.

TABLE 5. ESTIMATES OF THE HOUSING SHORTAGE, BASED ON VARYING ESTIMATES OF SOCIAL NEED AND OF HOUSING SUPPLY, UNITED STATES, 1945.
(numbers in millions)

ESTIMATES OF SOCIAL NEED FOR HOUSING	Number of families	HOUSING						
		Number including frictional vacancy	Estimates of housing supply—number of dwelling units			Housing shortage under varying assumptions of housing supply		
			a	b	c	a	b	c
High[1]	41.3	43.4	38.6	34.3	31.1	4.8	9.1	12.3
Intermediate[2]	40.0	42.0	38.6	34.3	31.1	3.4	7.7	10.9
Low[3]	38.7	40.6	38.6	34.3	31.1	2.0	6.3	9.5

[1] Number of social families, see Table 2.
[2] Number of families assuming one-half of the doubling up rate of 1940.
[3] Number of families assuming the doubling up rate of 1940.
a) Number occupied, plus those vacant, for sale or rent and fit for habitation.
b) Number occupied minus those in need of major repairs, plus those vacant, for sale or rent and fit for habitation.
c) Number occupied minus: in urban areas, units in need of major repairs or not having private bath or toilet; in rural areas in need of major repairs. Plus those vacant for sale or rent and fit for habitation.

less, even though the highest estimate obviously is not based on consideration of the ability of the population to pay for additional housing, it probably comes closer than any of the other estimates to a measurement of the extent of the housing shortage in terms of the accepted American standard of living.

The intermediate estimate of 8 million dwelling units presented as a measurement of the housing shortage makes considerable allowance for possible modernization and renovation of the existing housing plant; but it also definitely compromises our professed standard of living.

Since in the nature of the data it is not possible to arrive at a precise and fully objective figure on the extent of the housing shortage it is the judgment of the writers that it is a reasonable statement to describe the social need for housing as ranging from 8 to 12 million units. This, it is to be emphasized, is an estimate of the housing shortage for the year 1945.

How quickly the present deficit can be cut down will depend of course, on the speed with which the combined resources of private and public agencies can produce new residential units. That the rate of construction is low relative to the need is evidenced by the fact that current estimates of the construction of new units indicate approximately 1.2 million units scheduled for initiation in 1946 and 1.5 millions in 1947.[13] At this rate, it will require from five to ten years to eradicate the housing shortage of 1945 without any allowance for new construction to replace obsolescent housing destroyed by fire or other catastrophe and additional housing needed for new families.

Considerable interest attaches not only to the present housing shortage but, also, to that which may be expected in the coming years. Dr. Paul C. Glick of the Bu-

[13] See WYATT, VETERANS EMERGENCY HOUSING PROGRAM (Report to the President from Wilson W. Wyatt, Housing Expediter, Feb. 7, 1946). Of these 2.7 millions of units, one-fourth millions are definitely classified as of temporary nature, and thus will require replacement much sooner than would "permanent" structures. Although these are only non-farm homes, the number of farm dwellings is relatively small and would not affect these figures appreciably.

reau of the Census has estimated that the number of census families will increase from 37.5 million in 1945 to 44.8 million in 1960.[14] On the basis of past experience it can be expected that the number of social families will increase at a somewhat faster rate than will the number of census families. It is a minimum figure, therefore, to assume that the social need for housing in 1960 will be increased by 7 million additional units. Actually many more units should be built since (a) the number of social families will increase by more than 7 millions, and (b) of the available housing in 1945, a certain amount will become substandard by 1960 and need replacement. Thus, a projected estimate of 10 million additional units is not unduly excessive, in the opinion of the writers. If this estimate of 10 millions is added to the shortage estimated for 1945 the need for housing by 1960 can be stated as ranging from 18 to 22 million units.[15] In the opinion of the writers the higher estimate probably comes closer than the lower to conforming with the present and ever rising American standard of living.

It is to be emphasized that this over-all estimate of the housing shortage completely obscures great local variations which range from surplus to acute deficit. Unfortunately, adequate data are not at hand for widespread measurement of local variations. Geographic differences in the adequacy of housing are of course, greatly complicated by the nature and direction of internal population movements. Housing unfortunately, is largely fixed and immobile and out-migrants cannot take their dwelling units with them to areas of in-migration. It should be observed, however, that in general, the areas of greatest out-migration are areas with the highest proportion of housing which would be adjudged substandard by any criteria. The general character of population movements in this country tend, therefore, not to produce housing surpluses in areas of out-migration as much as to create greater deficits in areas of in-migration.

Although it is beyond the scope of this paper to indicate local variations in housing needs on the basis of the scraps of information which are available, it is the judgment of the writers that the factors considered in this paper and the methods used may be applied to local situations to obtain at least a first approximation of the social need for housing in the local community.

Experience shows clearly that the construction of new residential units is not highly correlated with the social need for housing. The swings in the construction cycle coincide only very generally with fluctuations in new family formation. Among the problems which face the construction industry and government housing agencies is the problem of achieving greater coincidence between residential construction and social need. That this problem is greatly complicated by the cyclical character of

[14] Paul C. Glick, *Estimates of Numbers of Families in the U. S.: 1940 to 1960*, U. S. BUR. OF THE CENSUS, POPULATION—Special reports, Series P-46, No. 4 (June 1, 1946).

[15] An almost identical estimate was arrived at through a quite different method by J. Frederic Dewhurst of the 20th Century Fund. Mr. Dewhurst estimated that 19.5 millions non-farm dwelling units and 2.9 millions farm units, or a total of 22.4 millions, should be built by 1960. *Hearings before Special Committee to Study and Survey Problems of Small Business Enterprises*, Senate, 79th Cong., 1st Sess. (May, 1945) 7649, 7652 (Problems of American Small Business series, part 64).

our over-all economic activity as well as by the complex relation of the construction and business cycles is clear. But it is also clear that until this intricate series of problems becomes more amenable to control than it has up to the present time, that the American standard of living will continue to be threatened by periods, such as the present, in which we are experiencing a grave housing shortage.

Perhaps some consolation can be found in the fact that the rate of population growth of the nation has been rapidly slowing down. Although the rate of growth of families will not slow down as rapidly, it, too, already shows evidence of deceleration and eventual stability. This undoubtedly will, in time, reduce the pressure for additional housing. This prospect, however, does not alter the hard fact that at the present and for at least several decades we are faced with a serious problem vitally affecting the lives of the American people, for which no easy solution is yet in evidence.

TECHNOLOGICAL POTENTIALS IN HOME CONSTRUCTION

ROBERT L. DAVISON*

The most serious handicap to progress in technical developments in the planning and construction of dwellings is the widespread feeling that housing, like the fine arts, is not subject to a rational approach or rational solution.

The analogy of the automobile and house has become the stock illustration for most articles on new materials and methods. "Prefab enthusiasts" maintain that houses could be produced in factories with belt-line production methods comparable to those used in the automobile industry. On the other hand, there are building contractors and other "practical men" in the building field stating that houses cannot be produced like Fords. People using the automobile analogy, and most readers, overlook the fact that *the automobile is not a mass produced horse and buggy*. The motor is not an evolutionary development of the horse. The horse cannot be assembled like a Ford motor, and neither can the traditional house be so assembled. The true understanding of the automobile analogy implies the development of a completely different kind of shelter than that which we think of at the present time as a home. In the same sense that the automobile is an improved form of transport rather than an improved horse and buggy, the dwelling of the future will be an improved form of shelter and equipment for family living rather than an improved traditional house. We had to change our thinking from animal husbandry to mechanics to get much better transportation and now we might do well to change our thinking from materials and methods, formerly the only possible ones, to those new materials and methods which can now be made available through the enormous increase in scientific knowledge gained in recent years.

TECHNICAL APPROACH

An extreme example of what a scientific approach to the problem of developing an ideal environment for living would be can be illustrated by reference to the work of Professor J. D. Bernal, a crystallographer who is now head of housing research for the English Government. He asked himself: "What molecular structure would make an ideal exterior wall?" Among the qualities set up as desirable was a

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crystalline structure which would not have cleavage planes between groups of atoms, would be transparent to high temperature radiation from the sun, and opaque to heat from comparatively low temperature sources, such as might occur within the building. He had many other qualities which he considered desirable, such as wide spacing of atoms of molecules to obtain lightness, elasticity, etc. He finally found a crystalline form in the joint of bamboo—a vegetable silicate—which closely approximated his theoretical ideal. Let me quote from him as follows:

> "The aerogels which are found in certain plant products, notably in the silicified pith of bamboo, can now be made in the laboratory as hard solids several times lighter than cork and practically perfect insulators against heat. They also have the incidental advantage of being completely fire-proof. If such material could be produced on a large scale, walls and partitions could be made from slabs weighing about 1 lb. per square foot."

Needless to say, as Director of Housing Research for the English Government, he is not waiting for himself or anyone else to find the correct molecular structure of an ideal wall, but this type of thinking and this method of approach are necessary before any important results will be obtained in this field or we can even recognize "technological potentials in home construction."

BUILDING CODES

The second important handicap is the "bugaboo" of building codes. It is beginning to be recognized that no important improvements can be made under present building codes. Codes should be put on a scientific basis. In recent years a great deal has been written and said about the substitution of "performance requirements" for detailed specification as now used in most building codes. While this is a desirable step, there is a real hazard in the setting up of performance requirements *unless these performance requirements are realistically related to actual functional needs.* I should like to differentiate between *performance requirements* and *functional performance requirements* by giving an example. In Report BMS92 "Fire-Resistance Classifications of Building Constructions" of the National Bureau of Standards, issued October 7, 1942, the following definition is given:

> "Fireproof Construction
>
> (1st part.) That type of construction in which the structural elements are of incombustible materials with fire resistance ratings sufficient to withstand the fire severity resulting from complete combustion of the contents and finish involved in the intended occupancy
>
> (2nd part.) *but not less than the rating specified in table 1. . . .* (The italics are mine.)

The first part of this definition is the type of functional performance requirement that should, in principle, be applied to all types of housing regulation. This first part of the definition was put in at the insistance of the most progressive members of the committee drafting this report—the latter part by the conservatives. In off-the-record discussions the conservatives agree that the latter part of the definition sets up test conditions much more severe than those called for by the first, or func-

tional performance requirements part of the definition, and it is questionable whether the second part does not negate the first.

Many of the most promising materials and methods would pass the functional performance requirements but not the arbitrary requirements as "specified in Table 1." For example, Foamglas (which is the only rigid insulating material which is of itself completely vaporproof) would not in economical thicknesses meet "ratings specified in Table 1," and therefore would be eliminated from consideration as a wall material for multi-story housing. Foamglas is not necessarily the best material or the only material that can be used for curtain walls, but it should be judged on its merits. Progress in this field is going to be very seriously handicapped if those in control of research policy, or research technicians, limit their research to methods acceptable under present codes or officially recommended performance requirements when these performance requirements are not *realistic in a technical sense.*

It is not only as regards fire tests that our codes are needlessly restrictive, but design loads are often needlessly high. Excessive factors of safety (which is often by the more progressive engineers called "factor of ignorance") cause overdesign and add cost.

These restrictive code elements are not limited to materials and methods utilized for the walls, floors, frame of the building, etc., but are perhaps even more restrictive in the field of mechanical appliances and equipment. Not only do they make equipment cost more than it should and greatly increase the labor required to install it, but these code requirements prevent progress in the development of more efficient plans. With a scientifically logical and rational building code, it might well be economically sound to provide a lavatory in each bedroom in addition to central bath and water closet. Our grandfathers had a wash basin in each bedroom and we might also have a low-cost concealed type if we had a rational plumbing code.

The minimal area of rooms for various uses, ceiling heights, window areas, etc., are sometimes covered in building codes and sometimes in special housing or health codes. Here we have specification approach to the problem of providing healthy surroundings. Due to lack of detailed knowledge of what constitutes a healthy environment, minimum space standards have been arbitrarily established. These are supposedly based on cubic feet required to maintain bodily health, but are actually based on area assumed to be required for furniture and circulation or psychological data. It would be most undesirable if *technicians* engaged in housing research were to permit these minimal space requirements to limit their approach to the housing problem. For example, 90 square feet has often been set as a minimum floor area for a bedroom. It is quite possible that a room of 70 square feet having a disappearing bed would be preferable if judged on a basis of functional performance. It might even be more desirable to have two bedrooms each of 45 square feet floor area than a 90 sq. ft. room occupied by two people, if proper light, ventilation, equipment, disappearing bed, etc., are provided.

If the technological approach to the housing problem and the *functional per-*

formance requirement approach to the building code is accepted, we may expect in the relatively near future radical new materials, new construction methods, and improved equipment and planning.

NEW INSULATING MATERIALS FOR CURTAIN WALLS

The material nearest in principle to Bernal's "Molecular Wall" is "Santocel," a material now in production by Monsanto Chemical Company. Sontocel is a silica aerogel, a very light porous form of silica, weighing 5 pounds per cubic foot. The air spaces in Santocel are so small that they are said to not only prevent convection currents, but effectively *interfere with molecular* movement. Monsanto claims a heat loss for one inch thickness of only 0.15 Btu per *hour* per square foot per Degree Fahrenheit, which is 10 percent better than theoretically "still air."

At the present time this material is too expensive for use as a curtain wall for enclosing a dwelling space. Its commercial use will probably, for the first few years, be confined to insulating refrigerators where its greater resistance to heat transfer than previously used materials will permit the use of reduced thicknesses of insulation, thus increasing the net usable cubic content of the refrigerator without increasing over-all size. This same principle will be of considerable value when applied to housing. For example, with a material of this character a 1-inch thick wall would have an insulating value more than twice that of a 12-inch brick wall. While this decrease in heat loss from the wall of a building might save only two cents or three cents per square foot of wall per year, the increase in comfort together with the rapidity with which the building could be heated up in the morning would be of considerable value.

From the standpoint of economics the most important factor would be the elimination of space now wasted in the exterior wall of most multi-story buildings. In an office building this would lead to an increase in *net rental return* from the building of $2.00 to $3.00 per lineal foot of exterior wall per floor per year—a nice increase in net profit before taxes. In an apartment building this increased profit would be less, but still good.

Another of the "technological potentials" which, while having perhaps less scientific "potential" than the silica aerogel just referred to, is at the present time being used in the building industry, is Foamglas. This is a foamed glass weighing approximately 11 pounds per cubic foot. At present this material is largely used as insulation in cold storage plants or roof insulation in buildings where it is important to guard against any possibility of condensation within the insulation material. In the future it may well be used as the core material for metal-faced curtain wall panels.

One of the principal reasons for using Foamglas is that it is the only rigid type insulating material that of itself, without an added vapor barrier, is proof against internal condensation of water vapor. Also, being glass, it is probable that it would last indefinitely if not subjected to excessive vibration or shock. While in all prob-

ability it would withstand a functional performance requirement fire test—i.e., complete combustion of the contents of an apartment without failure—it would probably not qualify in economic thicknesses as a core material for metal-faced exterior wall panels under most existing building codes, or even under proposed model codes, as the test temperatures exceed the melting point of glass. Since the standard test quickly melts window glass, it is customary in testing walls having window openings, to brick up the window openings so as to permit a *realistic* (?) test of the wall only. Under these standard test conditions Foamglas, even encased in steel, will melt before the bricked up window openings in the test panel. Yet it would withstand a *functional* performance test.

Several other materials besides Foamglas could be used for the core of a metal-faced spandrel wall. One, calcium hydrosilicate—previously known as Microporite and now called Kaylo—would, in 3-inch thickness, stand a severe fire test. This material is more rugged than the Foamglas and has very high fire resisting qualities which would doubtless withstand a two- and possibly a four-hour test. With the use of a material such as this or any material not absolutely vaporproof like Foamglas, it is necessary to hermetically seal the panel on the inside or provide ventilation of the exterior wall surface to remove any moisture that might get into the insulation.

There are various foam plastics which are of very great interest and may some day be used extensively as core material for metal wall units. The great advantages from the use of some of these plastics is their elasticity and light weight, which means high insulation value and easy transportation and installation. The disadvantages are lack of fire resistance—which may be partly compensated for by the metal surface—and high price per pound. Prices will decrease as these materials reach a point of oversupply. When the light weight of these foam materials (4 to 6 lbs. per cubic foot) is considered and the fact that less than one-fourth of a cubic foot is needed for a square foot of wall, a cost per pound of twenty cents to thirty cents is not so prohibitive. A price of ten cents might permit use of these panels in single-family residences.

Due to limited availability and the high prices of Foamglas, Kaylo, and foam plastics, probably the early types of metal-encased insulating material for curtain walls will have cores of vermiculite in board form, lightweight gypsum, or lightweight foam fiber concrete.

SURFACE MATERIAL

The selection of metal surfaces to enclose these various insulating materials has many pros and cons. Aluminum, due to its non-corrosive feature and lightness, has many qualities that recommend its use, particularly for dwelling construction under four stories in height. If aluminum were used with a combustible foam plastic, it might be safe for three- or four-story apartments, provided there was no

serious conflagration hazard from adjacent property. In higher apartments where egress in case of fire would be slower, it is desirable to have a higher degree of fire resistance of core, or surface, or both.

The best protection against loss of life in case of fire is probably the provision of enclosed fire stairs with exterior entrances and exterior venting. If you think back you will remember that loss of life in recent hotel or apartment fires has been generally due to smoke or burning of the interior of the building. The fact that the exterior wall had a four-hour fire rating was of no apparent help in preventing loss of life.

Once window glass is broken (say five minutes) the wall itself offers little protection to life against exterior fire hazard. Fireproof interior doors and partitions are much more important, as most fires originate indoors.

Calcium hydrosilicate, vermiculite or other lightweight concretes would probably give a reasonable degree of fire protection even though encased in aluminum, which in itself would not withstand prolonged exposure to fire. Here again we are not too sure of what a sensible functional performance standard would be until experimental structures have been built with some of these new materials and then tested. Copper would withstand fire tests better than aluminum and has other qualities to recommend it for metal enclosure of insulated wall panels. The most serious handicap to the use of copper is the difficulty in obtaining a pleasing finish. We have all seen copper with a beautiful patina finish, but so far it has apparently been impossible to obtain a lasting artificial patina finish. We may find some method of preserving the natural copper or bronze finish, or some transparent plastic film may be developed which will protect an artificial patina. If such a finish can be found the question naturally arises as to the need of using copper and one wonders why not apply such finish direct to steel at a considerable saving in first cost. There seems to be considerable doubt that such a plastic finish is available at the present time, but there is hope that a resin impregnated sheet fiber may be developed which can be laminated to metal, giving a surface treatment in color, which we may reasonably hope will have a life of thirty or forty years. If accelerated tests indicate that this is probable, such finishes might be applied to steel with the hope that they will last the life of the building. Should they show failure earlier than tests have led one to expect, it would not be too difficult to extend the life of the surface by giving a resin spray coat.

One of the interesting possibilities for surface metal treatment is the use of an 18 chrome 8 nickel steel, generally called stainless steel, such as was used for the exterior trim of the Empire State and Chrysler Buildings. For residential construction this bright finish might be objectionable, and a modified form used. Ten or twelve percent chrome steel pre-oxidized to a dark brown or black, might prove to be one of the practical metals for apartment houses of the future.

FLOORS, ROOF AND PARTITIONS

Generally (and this discussion is no exception) there is over-emphasis on the problem of exterior walls when discussing new construction methods. One reason for this is that exterior walls look larger in the budget than any other single item except combined mechanical equipment. Another reason the exterior wall receives more attention is that it is more difficult to meet all the requirements for an exterior wall than it is for the other elements in the house. For example, many codes require exterior walls in buildings over four stories to be of non-combustible material and to stand a four-hour test, while floors in buildings to six stories in height may be of wood and plaster construction and pass only a one-hour fire test. Walls have problems of waterproofness, internal condensation, weatherability, and exterior appearance, while interior partitions do not have to meet these problems and surfaces can be painted or papered, eliminating the basic problems of appearance. It should be obvious that the general principles of a lightweight core with a metal stress skin can also be used for interior floors and partitions. For floors the emphasis would shift from heat insulating to sound insulation with the determining factor as regards strength being the ability to withstand everyday load conditions—notably concentrated live load or vibration—and to withstand actual possible maximum concentrated load conditions without failure of the structure. Generally speaking, from a functional performance standard, the maximum distributed functional load has been assumed in the past to be that which may occur at a funeral. This generally accepted principle existed before the time of the "jitter-bug," and further study might indicate that a high school party would be the maximum load for which a floor should be designed. The fact remains that no one knows just how strong a floor should be for safety, or how stiff for comfort. The generally accepted rule that the deflection under design load should not exceed 1/360th of the span was derived to prevent deflections which would cause plaster cracks.

I have yet to find anyone who can give what I would consider a satisfactory reason for the degree of deflection which should be permitted in residential floors when plaster is not used, or any valid reason as to whether this deflection should be for an evenly distributed load, a static, or dynamic concentrated load. Possibly a better approach would be to specify that the elastic limit should not be exceeded in the floor structure under conditions of maximum probable load. This might be functionally defined as the impact of two couples per square yard doing a "jitter-bug" or some other violent form of dancing. How to translate the wear and tear of jive into foot pounds for stress analysis may not seem to be in the realm of serious applied design, but until we have definite scientific knowledge of the functional performance requirements we will not have a sound basis for building codes.

One of the most important qualities to be designed into a floor system is sound insulation against impact sounds. A concrete floor slab might be designed to withstand ten or even one hundred times the design load and yet be of such character that the sound of a woman's heels striking the floor would be transmitted to the

room below in a very objectionable manner. This transmission of impact sound is quite different from the transmission of airborne sound. Although heel impact would be clearly heard in the room below, such a floor might easily prevent the transmission of airborne sound such as people speaking, or a radio, etc. Concrete, which has been the generally accepted floor material in multi-story buildings, is very poor insulation against impact sound. Just what the material of the future will be we do not know, but it may be lightweight fibrous concrete, calcium hydrosilicate, or a lightweight gypsum or vermiculite. These materials are relatively weak structurally when compared with concrete, but would be amply strong if used in a structural laminate in which metal or some other skin takes up the compression and tension on the surface.

The roof will combine most of the requirements of a floor, with the addition of insulating and weather factors required for a curtain wall.

If satisfactory materials are developed for exterior walls, floors and roofs, the major problem is taken care of and it should be relatively simple to develop a lightweight panel for partition use. One serious problem is the provision of adequate sound insulation. Insulation against airborne sounds varies almost directly with weight if a homogeneous material is used. In other words, a homogeneous partition weighing one hundred pounds will give approximately ten times as much insulation against airborne sound as a ten-pound partition. However, if the partition is not composed of a homogeneous material but of a combination of different materials, or the surfaces are structurally independent or connected by elastic or spring connections of some character, the sound insulation will greatly exceed that of a solid partition of equal weight. Work being done on sound absorption and sound insulation in airplane cabins should point the way to a solution to the problem of control of airborne sound and vibration in building construction, without resorting to mass to obtain sound insulation.

APPEARANCE

The question is often raised as to whether people will accept these radically new materials and construction methods. They will if the materials and methods are a real advance over present materials from the standpoint of economy and quality, provided the producer or designer gives them a satisfactory surface color and texture. One might raise the question as to whether the public would accept lead paint as a finish for walls. The answer here would be determined to a considerable extent by the pigment used and the personal taste of the potential client. Some prospects might accept lead with almost any pigment, other tenants would refuse to live in a room, the surface of which was covered with lead paint, unless the pigment used appealed to their taste, be it good or be it bad. The same principle will apply to surface color and texture of radically new materials. They will not be offered to the general public by the speculative or operative builder unless there is an economic advantage to himself. They will be accepted by the buying or renting public if they

"like the looks"—in other words if the color and texture appeal to the individual prospect.

Although color and texture is all important in determining acceptability of a material, shape and window arrangement are of major importance in determining public acceptance of a dwelling unit. I should like to point out in this connection that the great majority of people have many more preconceived ideas as to shape of a single-family dwelling than they have in relation to an apartment house. It will be easier to put over on a mass scale radically new forms of multi-story buildings of various types than it will be in single-family houses where familiar forms play such an important part.

We have an interesting commentary on the acceptability of a new material in the case of office furniture. Originally filing cabinets were of wood in which the natural grain showed through a coat of varnish. With the advent of the metal filing cabinet the metal was finished to imitate wood. Later on the public accepted the idea of finishing the metal a dark green color which in no way imitated wood. Due to the shortage of metal during the war, it was necessary to manufacture wood filing cabinets and these were made in design and color to look as though built of metal. I think we may find the same thing happen in the field of building materials: first, new materials finished to imitate existing materials, then a finish suitable for the material and its function, and finally traditional materials developed in imitation of the new materials. In fact architects sometimes develop designs in advance of the materials which are available. For example, in Paris in 1933 when I was looking at a community of homes in the modern style, the architect who was showing them to me said, "To properly understand modern architecture it is well to remember that it is *as if* the modern architect said 'some day we will have new materials. When we have new materials we will have a new construction method. When we have new materials and new construction methods we will have new architecture. We have not the new materials, nor construction method, but we will have the new architecture anyway.'"

Many of the so-called modern buildings in both Europe and the United States are merely a stucco or metal face on a traditional wall. They are attempting the streamlined aesthetics of the aero-dynamic age with century-old materials. The fact that so many of our commercial buildings, particularly stores, have departed from the aesthetics of traditional materials, would seem to indicate that our so-called merchandising experts are not too afraid of public acceptance of new forms.

If the people of the United States, meaning government and/or private industry, spent 1/100 as much time, effort or thought on housing research as they spent on research during the late war, the results would not only revolutionize the construction industry, but would be of estimable value to humanity and/or profit to the new housing industry.

CHANGING ATTITUDES TOWARD PROPERTY OWNERSHIP AND MORTGAGE FINANCE

MILES L. COLEAN*

Throughout the history of real estate ownership and real estate finance, there has been a remarkable continuity and constancy in the legal foundations upon which governmental action has been based. Yet within the framework of a fixed legal tradition, two revolutions in the policy and objective of state intervention have occurred.

The first revolution began with the breakup of the feudal system which paralleled the growth of commercial and industrial enterprise in Great Britain. This development placed the state more and more in the background as it gave increasing outlet to individual initiative, and reached its peak in the founding of the American republic and in the land policies under which this nation so rapidly expanded.

In the United States the ownership of property became more than a legal and economic circumstance. It became the supreme symbol of individual freedom and of the protection of the individual in his freedom. The nation's land policy as it ultimately developed was primarily concerned with making this freedom available to the greatest possible number of persons. The effect of this policy gave its tone to the whole body politic, since even for those who did not care to undertake the hardship of seeking new land, the possibility of doing so was always present.

In its encouragement of a wide distribution of property the federal government gave little attention to the use of the land that was settled and almost none to the fate of the individual who entered his claim. The obligation of government was fufilled when opportunity was granted; and the individual was left to pursue his happiness in his own way and according to his own abilities. If his luck and judgment were good and his toil great, whatever reward he reaped was his; if he failed, his misjudgments and mistakes were no responsibility of the government.

The only exceptions in the exercise of this policy came in periods of general distress. Then the federal government generously modified the terms of its own land contracts and the states intervened to impede the process of foreclosure. Even these exceptions were not contradictory to the underlying policy. They were aimed not only at salvaging individual but at preventing the accumulation of land in the hands of a moneyed class and in preserving the concept of individual freeholds.

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The second revolution began with the closing of the frontier and the awakened concern with the wastage of natural resources and the decrease in individual opportunity. Government gradually developed new objectives which in many ways, were in sharp contrast to those that prevailed in the era of expansion. The conservation and restoration of its wealth in soil and forest when land was no longer there for the taking and the creation of security for its people to whom opportunity (at least within the old pattern) no longer existed—these were the goals to which government now turned attention. The movement was at first slow in developing. Its real momentum came from the impact of the Great Depression; and its apogee is not yet in sight.

Under the new dispensation, the free individual ownership of property is of less importance than the just use of property, as defined by government. The encouragement of individual initiative has less emphasis than the safeguarding of individual welfare. The assuring of a hygienic occupancy (as distant from an unqualified ownership) of property from the physical, economic, and social point of view becomes the root of governmental policy.

As the policy has evolved, regulation of property for social ends has been greatly extended through both state and federal instrumentalities. The first manifestations were in the vast expansion of the police power to create the now generally accepted controls of physical planning and land use as embodied in numerous state and local building, zoning, and planning laws, and in the conservation measures of the federal government. But so indirect an approach did not satisfy the new demands.

The federal government, reaching into the realm of traditional state jurisdiction, took on responsibilities for individual welfare and security which the states for the most part were indisposed or unable to assume. In the area of real property, however, what the states might undertake directly the federal government had to approach indirectly. Because of constitutional limitations, the federal government, for instance, could not directly exercise the police power to improve housing conditions, nor, as it soon discovered, could it exercise the power of eminent domain for housing purposes.[1] The federal government, therefore, was required to enter the arena of the social direction of real property largely through the avenue of credit, in which constitutional development had given it wide powers.

This limitation did not prove restrictive. Credit devices were found to offer an almost unimpeded freeway to the goal. By their use, the over-all supply of housing might be increased, and the number of farm owners might be increased. Special aid could be granted to this group or that—insolvent debtors, farm tenants, urban slum dwellers, families of low income, veterans. Interest rates could be specialized to meet the needs of certain classes. The lending policies of private institutions could be influenced to follow desired directions. Cities could be cajoled into accepting and promoting federal policies. Builders, at the peril of restriction of credit, could be required to observe designated standards. And through the same means, the char-

[1] U. S. v. Certain Lands in the City of Louisville, 78 F. (2d) 684 (1935).

acteristics of the new dwellings that were made available to the market could be subjected to governmental influence.

The mortgage insurance system of the Federal Housing Administration offers perhaps the most revealing example of the growth of the idea of the social direction of realty credit. The system was initiated as a means for bringing a greater volume of funds into the residential mortgage market than was possible under restrictive state legislation. It was particularly aimed at tapping liquid funds where they existed in greatest quantity at the time—in the commercial banks, which otherwise would have been largely kept out of the field. It was hoped that through this device residential construction would be increased and an important contribution would be made to the general economic recovery.

Initially FHA had no further objective than this. It established a careful appraisal method and a system of property standards; but these were only for the purposes of gauging risk and protecting the solvency of the insurance fund (for FHA from the start was intended to be a self-supporting business proposition). The service that FHA directly rendered the community lay solely in the ability to make credit more generally available for any who cared to make use of it. FHA was entirely impersonal in concept and undiscriminating among persons except in so far as ability to repay a loan was or was not evident.

For these reasons FHA lacked favor both with certain established home financing institutions who disliked its competition and with those who deplored its absence of social consciousness. Once, however, the device had demonstrated its effectiveness, the possibilities of its use for the advancement of selected social objectives became evident.

If easy terms could expand credit, easier terms, so the argument ran, could bring new homes to those unable otherwise to have them and to the special groups which government found reason to favor from time to time. If property standards could serve to protect an insurance fund, they could also be turned to the improvement of city planning and the protection of the home buyer. If the insurance device could be used to force builders to follow certain standards of construction it could also be employed to force them to pay standard wages.

Thus from a purely financial instrumentality, FHA has found itself more and more a device for directing and policing house construction and for making houses available on the basis of need rather than strictly within the limits of ability to pay. In the process the traditional concepts of credit tended to be lost. Special terms were made for special groups according to their special needs; and, instead of the most favorable terms going to the best risks, the tendency was exactly the reverse. In the process all but the appearance of homeownership was also lost, for, with the mortgage stretched to cover all but a nominal downpayment, and the amortization period extended to cover the probable duration of the utility of the property, an unencumbered freehold was rarely to be anticipated.

Other devices followed, with less circumvolution, the same objectives. The farm

tenant-purchase loans, under the Bankhead-Jones Act, which permit some control of farm management to be made a condition of easy credit, and the guarantee of loans to veterans under the Servicemen's Readjustment Act which reduced the down-payment to zero, are in the same trend. The loans and subsidies to local authorities for city-owned housing go much farther along the road of social control of real estate through the use of credit. The new vistas opened by extension of subsidized financing to provide an instrument for nominal ownership, as proposed in the farm housing sections of the General Housing Bill of 1946, indicate that the end of the road is still in the distance.

In the course of this development there is more than a mere subordination of the principle that property ownership is in itself a protection of individual freedom and initiative to the principle that individual freedom and initiative must not stand in the way of broader social objectives as determined by the state. The new attitude, moreover, tends to deny that property ownership is a source of freedom and initiative. On the contrary, it asserts, with increasing emphasis, that the individual is more likely to be enslaved than he is to be freed by owning property; that he is kept immobile in a fluid economy and his investment is put at the mercy of economic forces beyond his control; and that he is better off without the shackles of ownership in the strict legal sense.

In the new sense, the acquisition of ownership is largely bereft of its old responsibilities. With the original stake of the owner reduced in some cases to zero and the time of payment extended almost to the probable economic life of the property, free ownership becomes a fiction. What really exists is a new form of tenancy. With the government standing by (as it widely is assumed to do) to protect and salvage in time of distress, the mortgagor-mortgagee relationship tends to be considered as not involving a fixed and final obligation, but rather one that will be modified as needs arise.

The new conception of credit reduces the responsibility of the lender along with that of the borrower. In order to bring about lower interest rates and longer periods for amortization, greater safeguards for the borrower, and increased control over the character of his property, the government found it necessary to improve the quality of its guarantee and remove from the lender the cost as well as the risk of doing business. But in accepting this bargain, the lender finds himself a factor of constantly decreasing importance in the determination of his business policies.

We find the beginnings of this process in FHA where not only is a major part of the risk removed, but the task of appraisal is largely assumed by the government. It goes farther in respect to loans under the Servicemen's Readjustment Act, where the payment of the guarantee is made more immediate and where, through a provision for the assignment of a defaulted mortgage to the Veterans Administration, an automatic HOLC is set up. What would appear to be a final step is found in the 1946 amendments to the Bankhead-Jones Farm Tenant Act effectuated by the Farmers' Home Administration Act of 1946,[2] also known as the Cooley Act which

[2] P. L. 731, 79th Cong., 2nd Sess., Aug. 14, 1946, §5, amending 7 U. S. C. §§1001-1006.

creates a system of insurance on farm mortgage loans to special classes of borrowers. Here the transaction is wholly conducted by the government, collections are made by the government, delinquencies are immediately paid by the government, and defaulted loans are assigned to the government with full compensation to the lender. The lender's cost of doing business is no greater than that in connection with bond purchases and his risk is even less since his outstanding investment is guaranteed at par.

When the risk traditionally borne by the individual owner of property and the private lender on property is shifted to the government, there is brought about a profound change in the concept of real property and property rights, for the substance of property rights is gone when risk is eliminated. The rights are bound, in one way or another, to shift to the bearer of the risk. Carried beyond a certain point, therefore, the effort by the government to protect ends in the necessity of the government to control and, in effect, to own.

Both governmental protection and governmental control have increased at an accelerating rate during the past two decades. Even ignoring the presumably temporary controls of the war and post-war period, the shift from private to public initiative in real estate development and finance has been tremendous. Barring a major reaction of which there is yet no sign, it must be anticipated that this trend will continue.

REAL PROPERTY LAW AND MASS HOUSING NEEDS*

SHIRLEY ADELSON SIEGEL†

America faces unprecedented housing problems. Such are the needs for new housing, representing a backlog of demand aggravated by the cessation of normal building during the war and the sharp increase in the number of families, that the very extent of the need engenders extraordinary problems. Yet, there has been a continuity of practical experience, in the government's large-scale housing operations before and during the war, which provides a useful point of reference for the action now required. There has also been continuity in basic social, economic, and political structure, and with that, a continuity of the legal accompaniment. The continuity of that legal base and its adaptation to the changing housing problems of successive generations constitute the subject of this paper.

"Law is a living thing," in Justice Cardozo's apt phrase. Law is a tool, an instrument of the community and the policies by which it is governed. In real property law as it has evolved through centuries of Anglo-American history, one can see mirrored the progress of the world from a predominantly rural, medieval culture to a highly urban, industrialized system. In general this evolution has been accomplished with respect for the tradition of private property and without radical affront to the legal principle of *stare decisis*.

The shortcomings of the legal tools at hand are among the least of the obstacles to an adequate housing program today, although it must be acknowledged that in some matters the legal system has been sluggish in keeping up with the policy changes at other levels. The history of the refining of those tools, however, contains many an interesting story, and casts light on those legal problems which remain.

Without suggesting any sharp demarcation in dates, a breakdown of the history of the readjustment of real property law to developing housing needs into three stages will be useful for our analysis. *The first stage* is best characterized by the *laissez faire* era, when the primary function of government was to preserve order, and the courts supported on the whole an individualistic view of questions germane

*I am indebted to Professor Myres S. McDougal of Yale Law School as my mentor in the field of real property law, and for his helpful comments on this article.

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to housing. This general attitude persisted up to and through part of the nineteenth century. *The second stage* marks the emergence of the "welfare state," when reform movements, in revolt against the shocking slum conditions of the new urban communities, made their weight felt in restrictive and protective legislation, and local government began to adopt a positive approach to the problem of housing particularly for its relation to epidemics and disease. While much of the practice that characterizes this second period is still an integral part of the structure of housing law and legislation today, since the depression days of the 1930's a new chapter is being written, which we shall call *the third stage*. The welfare state has been emboldened. The state enters into partnership with private land owners, with local governments, with the citizenry, to lend its comprehensive powers and its resources to a fulfillment of housing needs.

FIRST STAGE—THE POLICE STATE AND LAISSEZ FAIRE

The common law of real property has unmistakably rural origins, as it was a rural England in which it took root some centuries ago. In that setting each man's home was his castle; and the right to quiet possession was a principal bounty of the legal system. To protect this possession, the law evolved a system of planning by private agreement: a doctrine of covenants was formulated whereby, upon a showing of "privity of estate" or an interest in the land in question, the courts enforced against takers with notice "covenants" or agreements which preserved certain values and uses found to "touch and concern" the land. Property values of the individual home were protected also by the doctrine of nuisance, which, for example, created a right to recover damages as a protection against noxious fumes exuded by a neighbor's business establishment—or which might even eliminate such offensive uses altogether. Furthermore, the pressure of the growing middle class against persistent feudal landholdings was reflected in the principle against restraints on alienation, and in other prohibitions of the creation of remote interests in land. The shortcomings (from the standpoint of housing thinking today) of the then prevailing social attitude and legal structure are dramatically revealed in the collection of revenue taxes on windows and chimneys.

Actually, in the earlier centuries the controls exercisable by the state over housing and town planning could not have been weak. Consider, for example, the deployment of governmental power for the comprehensive rebuilding of London after the great fire in the seventeenth century. At the same time the rights of the private home owner remained generally rather inviolate. With emancipation from the shackles of the medieval guild and the growth of a new sophisticated conception of the role of the state upon the advent of *laissez faire* thinking and practice, intervening centuries became progressively unused to central control. Thus, through the eighteenth and nineteenth centuries, first in England and finally in America, there were liberal concessions to growing trade and business with no brakes on the mounting slums which resulted from the exploitation of labor in concentrated urban communities.

"Hands off" may have been meaningful under the housing conditions of the relatively stable centuries preceding the industrial revolution; but certainly the centuries that saw the development of urban slums could only mock that inheritance of a rural land law. The official studies of housing conditions in the industrial centers by the middle of the nineteenth century tell a sorry tale.

SECOND STAGE—THE POLICE POWER AND THE WELFARE STATE

The emerging trend in the nineteenth century in reaction to revelations of the sordid conditions of the slums was in the direction of increased local governmental activity to correct such conditions, particularly for their relation to the public health. The administrative machinery was coming into being which made such attention to housing needs possible, as local government was undergoing considerable change during this century in consequence of this and other social conditions accompanying the industrial revolution; in response to such novel demands on municipal activity, new administrative posts gradually replaced justices of the peace.

In their tentative approaches to the urban housing problem, municipal officers proceeded under common law doctrines, generally but not invariably buttressed by some loose statutory brief for their authority which was related to the police power. Thus, at common law any private citizen could lawfully abate a nuisance; and now, like any private citizen, the municipal officer began to exercise such rights, and the nuisances were not mere highway obstructions and noxious uses of property, as in previous centuries, but even *homes* that might become fire hazards, or that were in such an advanced state of disrepair and insanitary living as to constitute immediate threats to safety and health. It was a haphazard process and a risky one. The common law tradition of collateral attack, whereby the public officer was liable for damages should the courts find subsequently that what he had abated was not a nuisance "in fact," persisted;[1] and no more could be done for abatement than was absolutely necessary, e.g., demolition would not be judicially upheld when mandatory repair or closure would suffice.[2] These risks naturally have acted as a serious deterrent to actions by municipal officers, even under color of statute or local ordinance,[3] to demolish hazardous dwellings or even to compel repairs. There may be some functional justification for the action for damages as a protection to property rights from reckless action by local officers under such a defective administrative plan as has generally prevailed; although the municipal employee is clearly not in a good position economically to bear such risks, and may even be damage-proof.

The foregoing statement of the law governing the compulsory repair and demolition of substandard dwellings is, unhappily, almost as true today as it was fifty years ago. Legislation is piecemeal and unsatisfactory; of 20 municipal demolition ordinances studied in 1936, 18 were enacted to reduce fire hazards and only 2 to

[1] See Health Department v. Rector, etc., Trinity Church, 145 N. Y. 32, 39 N. E. 833 (1895).

[2] Health Department v. Dassori, 21 App. Div. 348, 47 N. Y. Supp. 641 (1897); *cf.* Yates v. Milwaukee, 10 Wall. 497 (U. S. 1870).

[3] Ordinances for condemnation of defective structures have repeatedly been held constitutional, *e.g.*, York v. Hargadine, 142 Minn. 219, 171 N. W. 773 (1919).

remedy insanitary and substandard facilities.[4] Personal liability of municipal employees for damages is still good common law, although some states, by statute, grant immunity where the employee proceeded under a reasonable belief as to the existence of the facts,[5] specifically outlaw private actions regardless of reasonableness,[6] or simply transfer the liability in damages to the city.[7]

As the administrative process of compulsory repair of substandard dwellings and the demolition of hazardous ones develops, there are indications that the judicial process may accord correspondingly greater finality to administrative decisions. The basic judicial requirement is "a day in court."[8] A slum dwelling does not require the summary action essential in the case of diseased cattle, which also may be destroyed by the municipal officer in his exercise of local police power. As bad housing is not a nuisance that requires summary action, from every point of view ample notice and hearing are desirable elements of the administrative process. Thus, increasingly the determination of whether or not the demolition shall proceed should become administrative rather than judicial.[9] Whether a building is a nuisance at common law should no longer govern.[10] Let the evidence be weighed not by the courts, who are laymen in this matter, but by experts who can appraise the condition of dwellings from the standpoint of fire prevention, structural safety, health and sanitation, and even moral hazard, by standards of objective validity, and formulate a general plan of repair and demolition in the light of total local housing need and supply.

The story of the development of municipal efforts with respect to the demolition of substandard dwellings presents a dramatic instance of the problems of readjustment of real property law to evolving housing needs. The nuisance doctrine provided a framework within which progress can be made towards the stimulation of more perfect administrative processes, resulting in increasing immunity from judicial review implicit in such modern formulas as that the administrative order shall be conclusive if supported by evidence.

The nuisance doctrine made a second contribution upon the emergence of the welfare state, namely, the technique of zoning. We have noted that the common law doctrine of nuisance for centuries acted as a haphazard control over, for example, the juxtaposition of offensive industrial to residential uses. The concept was capable of considerable extension; not only the smells and fumes of an establishment may be offensive, but also its height, which cuts off necessary light and air. Even unaesthetic appearance may be a "nuisance" to the area. At common law these and

[4] Survey by P.W.A. Research and Information Branch, reported by EBENSTEIN, LAW OF PUBLIC HOUSING (1940) 11.

[5] Such a statute was involved in Valentine v. Englewood, 76 N. J. L. 509, 71 Atl. 344 (1908).

[6] See Milwaukee, Wis., code, section on demolition orders.

[7] This is the New York law. See Bellows v. Raynor, 207 N. Y. 389, 101 N. E. 181 (1913).

[8] See People v. Board of Health, 140 N. Y. 1, 35 N. E. 320 (1893).

[9] Horbach v. Butler, 135 Neb. 394, 281 N. W. 804 (1938), and the principle of New Hampshire Fire Ins. Co. v. Murray, 105 F. (2d) 212 (C. C. A. 7th, 1939) may be harbingers of a new trend.

[10] See Reinman v. Little Rock, 237 U. S. 171 (1915), and Hadacheck v. Los Angeles, 239 U. S. 394 (1916).

like extensions were little realized, but they were promised great scope when the zoning ordinance came into vogue. Zoning was to represent a coordinated effort by the local government to plan the height, density and setback of buildings and the distribution of residential and business uses, to the permanent social and economic benefit of the community. It first appeared in New York City in 1917, was quickly taken up as a model by other cities and was upheld by the Supreme Court as a legitimate exercise of the police power.[11]

It should have been apparent from the beginning, however, that the zoning technique had serious limitations in being only prospective in operation. Zoning was introduced into built-up areas; and it was destined to have little or no effect on existing buildings or uses, although some thought is now being given to the constitutionality of provisions for the gradual elimination of non-conforming uses by a system of amortization.[12] With the years, other limitations of the zoning device have appeared, largely attributable to its administration. There have been local business pressures; indiscriminating variances by administrative boards on appeal; overzoning for particular uses with resulting inflation of values; low standards; and spot rather than comprehensive zoning.

The police power that is articulated in zoning ordinances to regulate the character of future neighborhoods likewise supports state laws and ordinances prescribing minimum standards of construction of residential and other buildings. These ordinances, dating principally from the beginning of the twentieth century, regulate such matters as room size, fireproofing, plumbing facilities, etc., and have played an important role in improving housing conditions from the standpoint of health and safety. Attempts to impose such raised standards retroactively are supported by the courts.[13] Such are the economics of housing, however, that legislatures have repeatedly had to bow to pressure for moratoria[14] or for special subsidy[15] to bolster the program.

In the matter of specific building codes, reputed to obstruct the use of modern and often cheaper materials than those which they prescribe, it is undoubtedly true that while building codes are periodically being rationalized, their specific nature may make them unwieldly and inflexible, and also their formulation by local interests may make them excessively responsive to pressure from manufacturers and labor unions. Uniform codes are promoted, but except for the West Coast and certain other areas, have not been generally adopted. Some variation between geographic regions will, of course, always be essential. In this connection, it may be noted that in recognition of the critical situation created by backward codes, the courts permitted the government's wartime housing program to proceed in disregard of local codes.[16]

[11] Euclid v. Ambler Co., 272 U. S. 365 (1926).

[12] See Note, *Amortization of Property Uses Not Conforming to Zoning Regulations* (1942) 9 U. OF CHI. L. REV. 477.

[13] Adamec v. Post, 273 N. Y. 250, 7 N. E. (2d) 120 (1937).

[14] See, *e.g.*, N. Y. Laws 1944, c. 606; N. Y. Laws 1945, c. 338, §64.

[15] See N. Y. Laws 1946, c. 321; *cf.* N. Y. TAX LAW §5-a.

[16] United States v. City of Chester, 144 F. (2d) 415 (C. C. A. 3d, 1944)

A serious block to the progress of the programs both for the demolition of substandard housing and for the retroactive enforcement of higher housing standards has been the lact of decent alternative accommodations at low rents in which to house the families who must be displaced by these programs. The reconditioning of tenements into higher rental dwelling units causes such displacement no less than closure or demolition. This entire "second stage" suffers from a basic fallacy in its faith in the "filtering-down" process. In the era when the welfare state began to emerge, in the nineteenth century through the close of World War I and even until the depression years, it was comfortably assumed that the poor should live in second-hand housing and that there would be enough decent second-hand housing to go around. To reason why is fruitless; the fact is that the housing that gets filtered down is substandard to an important degree. Any program which proceeds alone to demolish the substandard housing or to correct substandard conditions (and thereby raise rents), in solving one problem has created another. Our economy is such, and the state of housing technology has been so imperfect, that probably more than one third of American families have been unable, throughout the industrial era, to pay the prices or rents of new housing, and there is never enough decent second-hand housing available to take care of their needs.

The poor chronically suffer from a shortage of homes. When, as in the years immediately on the heels of the first World War, the housing shortage became acute for everybody because there had been a cessation of new building, and serious inflation in rents was threatened, it was not inconsistent with the prevailing concept of the role of the state to enact emergency rent control laws, which were upheld by the Supreme Court as a legitimate exercise of the police power in response to emergency conditions. "Housing," said Justice Holmes in his opinion, "is a necessary of life,"[17] thus sounding the bell for new and more constructive housing programs then about to emerge.

THIRD STAGE—THE PUBLIC WELFARE: GOVERNMENT IN PARTNERSHIP WITH PRIVATE ENTERPRISE

By the 1920's there was a growing realization in many circles of the appalling inadequacy of earlier approaches to the problem of urban slums, which was now nearly a century old. The slums were still there; perhaps more so. In addition to the chronic problem of the high cost of decent housing that made it inaccessible to masses of the people, the cities were beginning to suffer seriously from "blight"—decaying blocks not of old tenement areas, but of abandoned, ill-planned industrial and residential land, usually at inflated value, that was an eyesore to the community. The slums and blight were accompanied by an accelerated decentralization, and as the population fled from the unattractive core of the cities to the outskirts, they not only drained local budgets by the ensuing duplication of municipal services: sewers, streets, schools, subways, for the new peripheral residential developments, but further-

[17] Block v. Hirsch, 256 U. S. 135, 156 (1921).

more, escaped beyond city limits, resulting directly in declining revenues which sat side by side with the mounting tax delinquencies from the bad areas in the center of town.

In that setting the remedies which composed the parcel of approaches characterizing the second stage were woefully inadequate—like trying to depose a king with a slingshot. Indeed, even if the local administrations had employed the earlier legal and legislative weapons with their greatest effectiveness, the job probably could not have succeeded against such a relatively free economy as characterized the era before the depression. The technique of zoning, for example, carries such implications of destruction to vested land values that it is obliged to come to terms with the power of the local landowners.

The approach of the third stage is drastic. It smacks of the socialism which in some form has become common to all the industrialized powers. The mood is not simply to pick out the individual bad dwellings, but to tear down the whole neighborhood and make it over again. Don't fuss to enforce compliance with revised standards; build new decent homes wholesale. Rather than anticipate a dislocation of demand and supply or a disparity between economic rent and income which warrants rent control as an emergency measure, control rents from the beginning, from the time that the house is built. This is an age of superblocks, which are themselves an affront to the tradition of small 50-foot lot holdings in America's cities. It is an age of bottomless private capital of insurance and trust companies and savings banks ready to enter the housing field, particularly the business of rental housing in the cities; thereby presenting a threat to the oldtime "speculative" builders who cannot compete with either the governmental advantages or the economies of bulk operation available to the large concerns.

In this era of group control rather than piecemeal operation, the government is a partner, silent or active, of substantially all activity related to the provision of housing. In the 1930's when the bottom fell out of the home mortgage market, the government stepped in to take the rap; HOLC bought up three billion dollars worth of mortgages. Home financing practice has been rationalized and revolutionized as a result of federal legislation. Now everyone is drifting into tenancy and home ownership is more of an illusion than ever.[18] In every aspect of housing whether industrial or rural, rental or home owned, private ownership and control become relative. The government is ubiquitous, and where not the government, something akin to it which is in effect private government, in the form of mammoth lending institutions or housing companies.

From the days when the courts were the repository of the principal controls that were exercised over housing—by rules relating to restraints on alienation, to nuisance, covenants, quiet possession—the initiative has passed to the legislative branch. The courts rationalize a continuity in this progress of urban civilization in upholding the validity of such legislative programs as expressions of governmental power to

[18] See CHARLES ABRAMS, REVOLUTION IN LAND (1939).

adjust to changing conceptions of need, through the flexible formula of "public purpose." In terms of legal tools these new developments probably have their greatest significance in the expansion of the power of eminent domain, and in the implications of the new program for the tax power.

Use of the Taxing Power

This period is characterized by a deliberate use of the taxing power to stimulate housebuilding or improvements by grants of immunity from liability for taxes. The experience in New York State is a case in point. After World War I, in a move to overtake the housing shortage the legislature permitted county and city units to grant certain tax exemptions on the value of all new residential buildings constructed within a given period.[19] In 1926 New York indulged in limited tax exemption for the so-called limited dividend housing projects authorized in that year, to be constructed by private companies regulated by law as to rents and profits.[20] When the federal government's public housing program of direct construction by the government of housing for low-income families, made its advent in the 1930's, tax exemption by the localities was an integral part of the plan for low rents,[21] combined with a provision for annual subsidies by the federal government; and the formula was with some amendment adopted by the State of New York in its public housing program launched under the new State Constitution in 1938.[22] Subsequently, the principle of "urban redevelopment" (to be discussed presently) began to be incorporated in the state program, and by laws passed in 1941 and in 1942 as amended in 1943, the state authorized the grant of tax exemption in varying forms to induce private capital to venture into slum clearance and rehousing operations.[23] Finally, as part of the program for meeting the World War II housing shortage, a formula of tax exemption and abatement has been authorized by the legislature to stimulate for residential use the rehabilitation of now vacant and boarded-up tenements.[24]

With the validity of these various tax devices established,[25] the lawyer's role becomes one principally of legislative draftsman. In that capacity he could well pause to consider whether past use of the taxing power in connection with the housing program has been indiscriminate. Government has progressed far since the days of William III, when a revenue tax on windows was a discouragement to decent housing standards. But in its eagerness to exploit the technique of immunity from taxes as an inducement to housing construction, has it appreciated fully the over-all implications for municipal finance, or the differing effects of tax exemption in the differ-

[19] N. Y. TAX LAW §5.

[20] N. Y. Laws 1926, c. 823, §30, now N. Y. PUBLIC HOUSING LAW, Art. IX.

[21] The public housing authority makes a formal payment to the municipality "in lieu of taxes," however, in amounts up to 10 per cent of the shelter rents on such aided projects.

[22] N. Y. PUBLIC HOUSING LAW, §52.

[23] N. Y. Laws 1941, c. 892; Laws 1942, c. 845; Laws 1943, c. 234.

[24] N. Y. Laws 1946, c. 321.

[25] *E.g.*, Hermitage Co. v. Goldfogle, 236 N. Y. 554, 142 N. E. 281 (1923), *aff'g* 204 App. Div. 710, 199 N. Y. Supp. 382 (1923); Roche v. Sexton, 268 N. Y. 594, 198 N. E. 420 (1935), *aff'g* 243 App. Div. 687, 277 N. Y. Supp. 939 (1935).

ing situations to which it is being applied? The general tax on real property, representing the most substantial source of local revenue, is already burdened by increasing demands on the municipal budget, increasing tax delinquencies and constitutional limits on the permissible tax rate. Moreover, real estate tax income follows people,[26] and while tax exemption to public housing developments may involve no out-of-pocket bounty by the city, as the people there housed come largely from tax-delinquent slum property, tax exemption (frequent though not invariable) to private companies housing middle-income families represents a loss in the amount of their taxpaying capacity, only partially offset to the extent that such people might have followed the suburban trend and moved out beyond the city limits altogether. And when tax exemption is authorized together with liberal terms of tax abatement to stimulate the rehabilitation of old tenements that could more profitably be torn down and displaced by new housing, here may be the most wasteful kind of policy decision. Tax exemption as a device continues to be promoted, however. It is a feature of the General Housing Bill (S. 1592) which will probably be reintroduced at the next Congress, providing for tax exemption not only for public housing, but also as a municipal contribution to schemes of slum clearance and redevelopment. A related development is the recent ruling by the Commissioner of Internal Revenue which allows income-tax concessions to builders of multi-family apartment houses.[27]

A different approach to the use of the taxing power for housing was proposed in the last century by Henry George and his followers: site value taxation, which would, it is argued, have the effect of correcting the chronic underbuilding of low-cost housing. By removing the tax on improvements and imposing it on land so as to tax increments in land value (more accurately termed "site" value), the cost of land is bound to drop appreciably, thereby stimulating building activity.[28] The high costs of city land have resulted in unreasonably high "densities," i.e., families per acre, to make enterprise profitable; the densities and the high rental costs which nevertheless result drive the population out to the periphery of the towns, creating in turn the difficult problems of transportation, *et al,* alluded to above. Once building is adequately stimulated in town at lower cost, densities and land use are readily amenable to control.

The optimum solution would be a municipal land authority with plenary powers to determine a pattern of land use and to provide for the necessary regulation, taking account of population and industrial trends, recreational needs, and so forth.[29] It would seem to be the rational solution to the maze in which cities now find themselves. A similar proposal was advanced by a British parliamentary commission headed by Lord Uthwatt a few years ago. The Uthwatt Report (giving substance

[26] See Tugwell, *The Real Estate Dilemma* (1942) 2 PUBLIC ADMINISTRATION REV. 27.

[27] Under this ruling, depreciation may be accelerated in the earlier years of the life of the building, rather than charged off on an equal annual installment basis. N. Y. Times, Sept. 5, 1946.

[28] See Buttenheim, *Unwise Taxation as a Burden on Housing* (1938) 48 YALE L. J. 240.

[29] See McDougal, *Municipal Land Policy and Control* (1945) 242 ANNALS (of the American Academy of Political and Social Science) 88, 93.

to the ancient English principle that title to all land was ultimately in the Crown) recommended that all land should *ipso facto* be declared in public ownership, thereby converting existing ownerships into leasehold and facilitating public regulation of land use.

Use of the Power of Eminent Domain

Second to no legal power in significance in this connection is the power of eminent domain, whereby large areas are directly acquired for clearance, replanning and rehousing. The necessity for employing the power of eminent domain in any comprehensive attack on the slums is manifest, in view of the tangle of multiple ownerships and hold-outs in sites to be acquired. And the government's venture into the construction of houses, whether by its own agencies or by publicly regulated companies, from the start has been linked with the program of slum clearance. Thus, while the need for condemnation power might have been avoided were housing developments to be confined to vacant land on the periphery, it could not be avoided if the provision of housing was to be part of a program of clearing away the slums in the heart of the cities.

The government first ventured into large scale housing as part of the "make-work" program of the Public Works Administration in the middle 1930's. The program became permanent with the passage of the United States Housing Act in 1937. Under the formula developed by the federal legislators, for every public housing unit to be provided by the localities with federal aid, there would have to be "equivalent elimination" of a like number of substandard units. Public housing projects are commonly constructed on former slum sites.

The second principal context for the use of the power of eminent domain in connection with housing is illustrated by the Urban Redevelopment Corporations Law passed in New York State in 1941. The gist of this legislation is a principle of slum clearance by self-help, whereby lot owners take the initiative in pooling their interests, covering an area of perhaps several city blocks, into a single corporation. They take back stock proportionate to the value of their respective interests, and the corporation undertakes clearance and rebuilding according to plan. Through the 1930's there had ben serious consideration of the advantages of such a procedure for the remaking of commercial no less than residential areas, but positive action was balked by the problem of forcing into the scheme those owners who were not willing to cooperate. Accordingly, under the 1941 law such redevelopment corporations were granted the benefits of the condemnation power and the recalcitrant minority could thenceforth be silenced, upon receiving compensation in full for the value of its property.[30]

[30] As we have noted earlier, this was not the first instance of governmental aid to private companies for the provision of housing, as New York had in 1926 enacted a law whereby limited dividend housing companies were granted limited tax exemption on certain conditions. The limited dividend companies operating under the 1926 law do not, however, enjoy any power of condemnation, exercisable either directly or on their behalf.

The third principal setting for the exercise of the condemnation power is the form of urban redevelopment more recent than the 1941 law and altogether more popular. "Urban redevelopment" is still in its infancy, the first legislative provisions dating only from 1942. It involves the clearance of urban land, usually fairly central slum or blighted area, and its replanning and rebuilding for a variety of suitable private and public uses. Logically, such redevelopment could incorporate wide use of old structures, such as churches or decent residential properties or particular commercial establishments; this has been widely done in England, but the limited experience under redevelopment laws in this country has so far not produced such examples. A redevelopment here generally connotes the wiping clean of a large city area, e.g., 18 city blocks on the lower East Side of Manhattan, and its replanning, involving usually considerable rationalization of the street plan to accommodate superblocks. The emerging pattern of the legislation is proposal of redevelopment scheme by private company which enters into contract with the city and accepts a certain amount of supervision and control of both fiscal and physical planning and sometimes also of rents. The extent to which the power of condemnation is essential for these drastic clearance programs must be apparent.

The power of eminent domain can be exploited for housing also through excess condemnation, whereby, by condemning more land than is needed for the public improvement which is the subject of particular condemnation proceedings, the city comes into possession and ownership of lands thereupon available for the creation of residential communities under public ownership or control.[31] This is not a bold approach, however. Town planners regard with envy the experience of many European cities, such as Stockholm and Copenhagen, where a large portion of the city area is municipally owned; the European experience inspired a novel section in the New York Constitution of 1938 (Art. 18, Sec. 9) to the effect that any city may acquire "by purchase, gift, eminent domain or otherwise," such property as it may deem "ultimately" necessary for its housing program, though temporarily not required.

Proposals are made from time to time for the cities to take the initiative in buying up slum lands and replanning them, thereafter selling or letting to private ownership, according to the scheme that has evolved. While the merit of such proposals is clear to the city fathers, the stark matter of cost has been the usual obstacle to action. Hence the trend towards redevelopment by insurance companies and savings banks, which have a large reservoir of private capital and are both willing to make the investment and in a position to do so. Their investment is not a complete answer, however, as there remain central areas which because of excessive costs cannot profitably attract clearance and necessarily involve an out-of-pocket loss upon readjustment at proper use value. The formula in the Wagner-Ellender-Taft Bill,

[31] Where slum clearance is the subject of condemnation proceedings, excess condemnation is a device for acquiring control over land adjacent to the development. See Note, *The Constitutionality of Excess Condemnation* (1946) 46 COL. L. REV. 108.

which as S. 1592 passed the Senate at the last session of Congress and will be reintroduced, purports to provide the answer: federal aid to the municipalities by annual contributions substantially making up the difference between the cost of the land and the new use value. This scheme has been satirically described as "the slum dole,"[32] and undoubtedly has the effect of bailing out landlords of slum property to their profit.

Slum clearance and rehousing did not have to be approached by the costly slum dole method, although now there do not seem to be feasible alternatives. Under English law, no condemnation award is given for buildings judicially determined to be unfit for human habitation. In this country, constitutional guarantees of payment of full compensation preclude any such socially desirable solution. A more wisely and widely developed use of the nuisance doctrine discussed earlier in this paper, requiring demolition of unsafe and insanitary housing, would have accomplished the same result. This is still possible, although at the risk of an unfavorable reaction of the courts upon subsequent condemnation, akin to the feeling of some courts, in spite of formal doctrine, that the city is bound to condemn at something at least approximating the assessed value that it had itself placed on property for purposes of taxation.[33]

Every extension of the power of condemnation requires judicial support of the legislative finding that the land is to be acquired for a "public use." When this question arose in connection with the federal government's public housing program, the government lost in the lower courts, which were not inclined to interpret traditional authorities liberally so as to permit the government to go into the business of housing.[34] Before taking the issue to the Supreme Court, decentralization of the program for administrative considerations was decided upon and the legal question became moot. Within a relatively few years, proponents of the program of public housing had succeeded in establishing in state courts that housing qualified as a public purpose.[35] Decisions *contra* are clearly an anachronism, such as the ruling of the Ohio court a few years ago.[36]

The legality of condemnation as an aid to redevelopment of the first kind described above, a cooperative scheme of the present lot owners, has never been contested in the courts, the war years having interrupted any plans that might have materialized. The grant of the power of condemnation to redevelopment companies, as that term is usually understood, has been ruled upon in both New York and Illinois, and in both cases the courts found the requisite "public use."[37] A

[32] Abrams, *The Slum Dole—A New Challenge to Public Housing* (February, 1944) CHC Housing News 1.

[33] See ORGEL, VALUATION UNDER EMINENT DOMAIN (1936) 515.

[34] United States v. Certain Lands in the City of Louisville, 78 F. (2d) 684 (C. C. A. 6th, 1935).

[35] N. Y. City Housing Authority v. Muller, 270 N. Y. 333, 1 N. E. (2d) 153 (1936) and other decisions cited by McDougal and Muller, *op. cit. infra* note 36, at page 46.

[36] See McDougal and Muller, *Public Purpose in Public Housing: An Anachronism Reburied* (1942) 52 YALE L. J. 42.

[37] Murray v. LaGuardia, 291 N. Y. 320, 52 N. E. (2d) 884 (1943); Zurn v. City of Chicago, 389 Ill. 114, 59 N. E. (2d) 18 (1945).

peculiar wrinkle of the New York case is that the very civic groups most interested in promoting rehabilitation of slum areas by extensive use of governmental powers, opposed the grant of condemnation under the Redevelopment Companies Law and challenged the law's constitutionality. The New York State Constitution (Art. 18, Sec. 2) authorizes the grant of the power of condemnation for slum clearance and redevelopment *either* to a municipality *or* to a private company "regulated by law as to rents, profits, dividends and disposition of its property or franchises." Under the New York statute, it was argued, the condemnation power, although given nominally to the municipality, actually put the municipality in the position of an agent for a company which could not have qualified as a regulated company within the intendment of the constitutional provision. But the New York court would not look behind the language of the statute and upheld it, on the principle that clearance of slums alone constituted a sufficient public purpose. In this connection, it is of interest that there is now a statute in New York which does no more than make express the power of municipalities to acquire substandard and insanitary areas by condemnation.[88]

The provision for the grant of the power of condemnation in the New York Redevelopment Companies Law of 1943, which has been used as a model for other jurisdictions, states that not only is the contemplated redevelopment in each case a "public use," it is a "superior" public use. The implications of its being a superior public use are serious for all public buildings, schools, fire houses, churches, and even limited dividend housing projects on the site. The expression "superior public use" must be galling to the thousands of families as well as business establishments that are peremptorily displaced by redevelopments of the size of those now emerging.

Displaced families present an acute problem even when the nation is not suffering from a housing shortage, as for families living in slums there is a housing shortage in the best of times. It would be ironic indeed if the effect of slum clearance projects on a wide scale were simply to drive families into bordering tenements, thereby depreciating those properties and producing equally unsatisfactory slums overnight. Legislative drafters have made some stabs at this problem, by requiring that the city examine the provision that is to be made for displaced families, before it gives its approval to any redevelopment scheme; and some laws (compare the Wagner-Ellender-Taft Bill) legally obligate the redevelopment company to give preference in its selection of tenants to families from the site area.

Redevelopment Projects and Minority Groups

The implications of large scale redevelopment are particularly keen for minority groups living in the project areas. Negroes and other non-white persons are affected by redevelopment projects in several ways: On the one hand, there are very few

[88] N. Y. Laws 1945, c. 887, adding Sec. 71-i to the MUNICIPAL LAW. The reader may be confused as to the necessity for this statute, in view of Art. 18, Sec. 9 of the New York Constitution referred to earlier; and indeed, many lawyers did not consider it necessary, but it was politically expedient at the time of passage.

areas to which they are able to move, because of the prevalence of restrictions against non-white occupancy. Moreover, as the pattern of housing for minorities in this country is such that Negroes must generally live in cast-off housing rather than new housing, it may be presumptively regarded as unlikely that they would be admitted to tenancy in the redevelopment project, unless there were some legal obligation to force their access.[39]

Upon analysis, it may appear to be a municipal rather than private responsibility to determine the availability of housing for families displaced by such large scale redevelopment schemes, as only the municipality can have the facilities for an adequate study of the distribution of housing and of housing needs in the locality. From the standpoint of social desirability, it would seem that redevelopment companies, enjoying the status of "superior public use," and frequently the recipients of tax exemption as well as other extensive public bounty, should be obligated to accept tenants without discrimination as to race, creed or color and to give preference to displaced families. As the result of a clamor over this issue in New York City's first and largest redevelopment project, Stuyvesant Town, New York City now has a local law providing for the withdrawal of the benefits of tax exemption from any housing or redevelopment company found to discriminate by reason of race, creed or color.[40] A like provision has been written into the state redevelopment law in Pennsylvania.[41] An effort has been made[42] and will be repeated to have such non-discrimination policy enforced as a matter of constitutional law, on the theory that as government is contractually and otherwise involved with private redevelopment companies, it in effect participates in the discrimination, in violation of the guarantees of the Fourteenth Amendment.

Public housing has had a different history; the New York State Law (the only state public housing program in the country) specifically provides against discrimination in tenant selection,[43] and this is also federal practice, although not provided for by statute. While non-discrimination by public housing authorities is general, segregation within the project is still common, however.

In this era of large scale demolition and rebuilding with their special threat for minority groups, the latter make persistent efforts to extend the non-discrimination policy which governs public housing and is on the road to governing redevelopment.

[39] This problem was well illustrated last spring, when the Planning Board of East Orange, New Jersey, recommended a twenty-year redevelopment plan and the local Negro community noted with consternation that it involved the proposed clearance of virtually 100 per cent of the areas occupied by Negroes. As some of these areas included well-kept, owned homes, it was suspected that the replanning scheme might have been motivated by a desire to drive "undesirable" elements out of East Orange, restoring it to its place as a lily-white suburb for the professional white class. The New Jersey Redevelopment Companies Law, modelled after the New York statute, imposes no real obligation on redevelopment companies to present a plan for the rehousing of displaced families, to give preference to displaced families in the selection of tenants, or to accept tenants without discrimination as to race, color or creed.

[40] CITY OF NEW YORK, ADMINISTRATIVE CODE §J41-1.2.

[41] PA. STAT. ANN. (Purdon, Supp. 1945) tit. 35, §1711(a)(1) and (8).

[42] Eliot Pratt, etc. v. LaGuardia *et al.*, 182 Misc. 462, 47 N. Y. S. (2d) 359 (1944) *aff'd* 268 App. Div. 973, 52 N. Y. S. (2d) 569 (1944), lv. to appeal denied, 294 N. Y. 842.

[43] N. Y. PUBLIC HOUSING LAW §223.

Such efforts are made particularly when public aid or the grant of governmental power is involved, as in connection with the bill to stimulate the rehabilitation of tenements in New York by a liberal grant of tax exemption and abatement.[44]

Eventually, there will be a movement for the elimination of discrimination in all private housing, just as some states have succeeded in enacting legislation, on the FEPC model, to eliminate discrimination in private employment. In private housing accommodations, discriminations are generally rife. Tens of millions of Americans who are members of minority groups suffer from a peculiarly limited market in housing and are segregated in black belts or in ghettoes. It is easily demonstrable that such persons have to pay much more for their housing than white families, and also are obliged to pay such excessive prices for the most substandard homes.[45] The implications of this situation for our democracy, our economy, and our political and social development would fill volumes; only one of the many aspects of this difficult problem was reflected in the circumstance that in the Detroit race riots of 1943 the rioters came from segregated areas, not from mixed housing areas.

It is ironic that the federal government, which has made a notable contribution towards breaking down discrimination in housing by its policy of non-discrimination under the public housing program, has with another hand buttressed and encouraged the growth of restrictive housing practices. The Federal Housing Administration (the government's mortgage insurance agency) has for years been expressly instructing its field men in the merits of restrictive covenants for the stabilization of property values, and has discouraged the lending of money at easy credit for the modernization and building of homes for non-white families. Some day the courts will be presented with the challenge of evaluating the legality of such FHA practice under our Federal Constitution and Congressional laws.[46]

The usual method for preventing Negroes and other unwanted elements from acquiring or occupying property is by use of the covenant. As we have seen, the covenant is one of the oldest legal tools available for the preservation of property values against depreciating uses. Covenants could be of inestimable use today in preserving physical standards of property replanned under comprehensive redevelopment schemes; under the doctrine of *Tulk v. Moxhay*,[47] covenants which a purchaser takes with notice are enforced against him. The use of covenants, in schemes for the general development of a residential area, to avoid ownership or occupancy by persons of a particular race, creed or color has developed recently. A perversion of the original purpose of this legal principle—yet, virtually every American jurisdiction that has passed on its validity has upheld such a discriminating covenant (whether written into the deeds upon the platting of a subdivision, or whether a separate agreement hastily signed by contemporary property owners upon a threat of infil-

[44] See note 24 *supra*.

[45] See unpublished study by Corienne Robinson, "Condition of Dwellings by Rentals by Race," based on 1940 Census (Federal Public Housing Authority Library).

[46] *Cf.* REV. STAT. §1978 (1875), 8 U. S. C. (1940) §42.

[47] (1848) 2 Ph. 774, 41 Eng. Rep. 1143.

tration). Where such agreements also prohibit sale or lease to persons of particular race, creed or color, they would seem to fall squarely within the prohibition of the old English rule of the invalidity of restraints on alienation to whole groups of people, and in deference to common law principles, many courts have struck down covenants in this form, while at the same time upholding the validity of the covenants against use.

In the dozens of law suits now pending for enforcement of such anti-racial covenants in reliance on earlier decisions, important constitutional questions are being raised, notably the matter of enforceability as an infraction of the equal protection clause of the Fourteenth Amendment of the Federal Constitution.[48] Reference is also made to the Chapultepec resolution and to the provision in the Charter of the United Nations obligating the United States government to prevent within its borders discrimination on grounds of race, color or creed.[49]

Covenants by land owners to keep out racial and other groups would seem to constitute a conspiracy that should be denied enforcement at common law, housing being "a necessary of life" and a subject of trade. A conspiracy against minority groups in their strivings for decent housing is currently one of the subjects of an anti-trust proceeding instituted this year by the Department of Justice against 37 banking and insurance companies of New York.[50]

In this setting of restrictive practices cutting down their market for housing, the housing shortage is not new to the minority groups. They have always suffered from a shortage and all its evils, and the present acute housing shortage which is being suffered on an unprecedented scale by all Americans intensifies their plight and accelerates the need for an early legal and practical solution: a challenge to the statesmanship of the judiciary.

* * * *

In time of housing shortage, even the attempt to remove deficient housing and to build new houses is frustrated by the lack of accommodations for the families to be displaced, thus postponing what cannot afford to be postponed any more than the construction of homes for veterans: the demolition of unsafe and insanitary housing. And in time of housing shortage, a certain amount of jerry building is inevitable; a certain amount of waste in the provision of facilities for projected new subdivisions, is inevitable. In this speculative boom the necessity for sensible plan-

[48] See McGovney, *Racial Residential Segregation by State Court Enforcement of Restrictive Agreements, Covenants or Conditions in Deeds Is Unconstitutional* (1945) 33 CALIF. L. REV. 5.

[49] See, for example, Anderson v. Auseth *et al.*, pending before California Supreme Court (docket no. L.A. no. 19759), and Kemp and Lutz v. Rubin, pending before New York Supreme Court, Queens Country; *cf. re* Drummond Wren [1945] O.W.N. 795 (Ontario).

[50] Figures produced as a result of the 1940 census which would seem directly to support the anti-trust suit are findings that the non-white population pays on the average a higher interest return on first mortgages than the white group. See *op. cit. supra* note 45. Special discrimination in the cost of credit is particularly curious in view of the findings of the National Association of Real Estate Boards that Negro families constitute at least as good a risk as mortgagors as white families, and maintain their property well.

ning gets lost, and much is constructed in a hurry that can then be repented at leisure.

The limitations of this paper have naturally made impossible any thorough analysis of the legal issues which agitate the problem of veterans' housing today. This has been only an outline of the trends, pointing up some of the provocative questions. Attorneys close to the housing scene find interest centered particularly in building codes; federal legislation to bring down the prices and rentals of homes through liberal public aid; restrictive covenants and problems incident to interracial occupancy; planning and zoning controls over new subdivisions, already mushrooming on the periphery of cities; the revival of cooperative housing and other mutual home ownership plans. The difficulties which the housing and planning problem present will be minimized by an appreciation on the part of lawyers and other social scientists of the trends which are involved, and of their role in perfecting the necessary legal tools and otherwise devising legal and practical solutions for apparent dilemmas.

HANDICRAFT AND HANDCUFFS—THE ANATOMY OF AN INDUSTRY

LEE LOEVINGER*

The number one national mystery today involves neither sex, crime nor violence, but merely the vital question of why we do not have enough houses to shelter our people. By way of solving the mystery nearly everyone concerned has made a public nomination for the villain of the piece. Business claims it's labor, labor says it's business, Republicans blame it on the government, and harassed government officials swear that it's all due to an unkind providence. Best of all, everyone has some evidence to support his viewpoint, for no one seems to be wholly innocent in the affair. However, not every fault of everyone connected with the building industry necessarily contributes to the housing shortage. Realism compels recognition that morality and efficiency are not always related. The inescapable facts about housing, detailed in other articles in this symposium, are that there is not now, and has not been for many years past, enough livable housing in this country to provide decently for the needs of the whole population. The unanimous conclusion of competent investigators regarding the cause of this condition is, as stated by the T. N. E. C.: "Inadequate housing in this and other countries is largely a result of the excessive cost of building. . . . By far the most effective way to provide adequate housing for all income groups, and without which it cannot be provided, is through the substantial reduction of building costs."[1] Since housing is unavailable to the masses of the people because it costs more than they can pay, any significant inquiry into practices and policies in the construction industry must search not for examples of wickedness, but for the causes of the high costs.

It might appear superficially that the easiest way to find the reasons for high costs in building would be to begin with an analysis of all the costs, and then to proceed to a more detailed examination of those that were the largest. There are two objections to this approach. To begin with, the ultimate cost of any building is made up of so many items that—unless the grouping is artificially broad—no single item represents any very large proportion of the total. A greater difficulty is the fact that the comparative size of the cost items themselves will depend upon the nature of the analysis. Thus a conventional breakdown of construction costs may show

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[1] TEMPORARY NATIONAL ECONOMIC COMMITTEE, TOWARD MORE HOUSING (MONOGRAPH No. 8, 1940) 123-124. Hereinafter cited as T. N. E. C. MONOGRAPH 8.

that labor represents 30 per cent of the costs, materials 60 per cent, and profit and overhead 10 per cent.[2] In this analysis, the breakdown is vertical, and the labor considered is that involved in actual construction work at the site. However, it is obvious that labor is also involved in the manufacture of the materials which go into the building. If an analysis is made which attempts to determine the total labor cost involved in the whole process, from the original extraction of the materials to the final construction job, the result is quite different. On such a horizontal basis the labor cost may be estimated between 70 per cent and 90 per cent.[3] So there is this fundamental difficulty in any theoretical approach to the problem: that the significant practices are those which contribute unduly to costs, but that one cannot tell which practices contribute unduly to costs without knowing which ones are significant. The nature of this dilemma should serve as a warning against too ready acceptance of all the glib explanations of the housing "crisis" now appearing in newspapers and popular magazines. However, the lesson of this dilemma is not that an investigation of the problem is impossible, but that no investigation can safely neglect any phase of the entire process.

THE LABOR UNIONS

The aspect of the building business which receives the greatest attention in most discussions of high construction costs is the activity of the building trades labor unions. Exactly what proportion of the labor engaged in construction work is unionized is difficult to determine precisely. The T. N. E. C. reported that in 1936 about 57 per cent of the labor engaged in residential building was organized, and that the percentage was about 72 per cent in nonresidential building.[4] Undoubtedly the proportion of organized workers has risen since then. In many of the larger cities the A. F. of L. building trades unions dominate the field to a degree that makes it difficult or impossible to get any work done except by members of those unions. This is one field in which the C. I. O. has been unable to compete to any significant extent. The complete dominance of the A. F. of L. is illustrated by the fact that when the C. I. O.'s United Electrical Workers bought an old New York mansion for a national headquarters, they had their fluorescent lighting installed by members of their rival union, the A. F. of L.'s Brotherhood of Electrical Workers. The multitude of building trades unions which dominate labor in the construction field is in turn dominated by a few strong labor groups. The largest and strongest of all the building trades organizations is the Carpenters' union.[5] This is easily understood when it is realized that more than one third (about 36 per cent) of all the workers employed in construction are carpenters.[6] Another third of the workers is made up of painters and of laborers and helpers; three more groups—plumbers, bricklayers and masons, and electricians—comprise another 20 per cent of the total.[7]

[2] *Id.* at 44. [3] *Id.* at 189. [4] *Id.* at 50.
[5] See *Boss Carpenter* (April, 1946) 33 FORTUNE 119
[6] DEP'T OF COMM., MARKET RESEARCH SERIES No. 101 (April, 1936) 30.
[7] *Ibid.*

These six important groups of workers total approximately 90 per cent of all those employed in construction; the remaining 10 per cent being scattered among plasterers, tinsmiths and coppersmiths, structural iron workers, paperhangers, roofers, stonecutters, and others.

There is no doubt that the building trades unions do exert a powerful influence in opposition to the introduction of labor saving methods. Painters are permitted to use brushes of a certain width only—front page headlines report that Union Painters Stop Work on Veterans' Houses—because the brushes are half an inch too wide.[8] The Painters' union also tries to prevent the use of sprayguns in painting woodwork and the installation of cabinets or other fixtures which have been painted at the factory rather than on the site.[9] There are similar restrictions in nearly all other fields of construction labor. A cut stone contractor in New York complained to me recently that he could not get contracts on any jobs because his stone was cut to order at the quarry rather than at his own yard. The quarry employed members of the same union as he and the other stone contractors in New York, but local unions insisted that the work be done by local workers. The Department of Justice secured a consent decree some years ago forbidding this very practice[10] but, at the present time, the Department apparently is unwilling to attempt enforcement of such decrees in view of recent decisions regarding the application of the Antitrust laws to labor.

Unions usually oppose the use of powered or mechanical equipment to do work which has previously been done by hand. Plumbers are often required to cut and thread pipe by hand on the job, although it could be finished more efficiently off the job; plasterers are restricted in the use of the plaster gun; and carpenters are limited in the use of power saws, mortisers and power planers.[11] These policies sometimes have ludicrous results from the viewpoint of industrial efficiency. In one city plumbers insisted on the right to cut the threads off prefabricated pipe lengths and cut new threads on the job.[12] In another case, the electricians refused to allow the installation of switchboards which had been wired at the factory, although it would have cost $3,000 more to wire the switchboards at the site of installation.[13] The result, I am informed, was that the purchasers of the switchboards hired two union electricians to sit around for a couple of days each time a switchboard was installed, even though these workers would have been unable to re-wire the switchboard had they been inclined to make the attempt.

Union opposition to such labor saving methods takes various forms. In some places the glaziers refuse to work on jobs which use windows with glass installed at the factory, demanding that sash and glass be delivered separately to the site and

[8] St. Paul Pioneer Press, Aug. 20, 1946.
[9] United States v. Painters Dist. Council, 44 F. (2d) 58 (N. D. Ill. 1930), aff'd 284 U. S. 582 (1931).
[10] United States v. Journeymens Stone Cutters Assn., *et al.*, ANTITRUST BLUE BOOK No. 323.
[11] T. N. E. C., MONOGRAPH 8, p. 134.
[12] LASCH, BREAKING THE BUILDING BLOCKADE (1946) 98.
[13] T. N. E. C., MONOGRAPH 8, p. 55.

each window be assembled by hand. Carpenters often refuse to install factory-fitted doors, windows or floor pieces.[14] Plasterers insist on three coats of plaster over rock lath, although two are quite adequate; and they have refused to do any work on projects which proposed to eliminate plaster on ceilings by painting over concrete, a process both economical and efficient.[15] Sometimes the restrictions are embodied in contracts with employers. Some such contracts provide that painters, rather than laborers, shall wipe up the paint on any job, that plumbing fixtures shall not be installed with the trimmings in place but the trimmings shall be removed and attached on the job,[16] and that electricians shall be hired to "install" electrical refrigerators, where such installation consists of plugging an ordinary cord into a socket.[17]

Closely allied to the resistance against labor saving methods is the strong insistence on keeping as much work as possible within the "jurisdiction" of each union—a policy which inevitably results in clashes between various unions. The details and evils of the "jurisdictional dispute" within the ranks of labor are much too well known to require any elaboration. To expatiate on them at any length is rather like inveighing against sin. It should be noted, however, that they grow out of the same attitude which impels the opposition to technical and mechanical labor saving—the belief that there is only a certain limited amount of work to be done, and that the function of each union is to get as much of it as possible for its members.[18] The validity of this assumption should be examined separately, as it does not necessarily involve the justification for this attitude. The real objection to jurisdictional disputes is not their nature but the methods by which they are carried on. If the disputes were merely internal, within the A. F. of L., they probably would not affect the cost of building and the public would be unconcerned. However, when one union attempts to keep work to itself, or wrest it away from another union, by strike or boycott, that adds to the ultimate consumer's cost. In the long run, it also adds to labor's cost; for the public, even that portion of it most friendly to labor, can understand a strike against an hostile employer, but cannot understand a strike against an employer who is perfectly willing to hire union labor at union wages but is caught between the conflicting demands of two unions, each of which insists that its members shall get the job—as in the famous Hutcheson case.[19]

From the viewpoint of those who believe in the importance and value of labor unions (including the author), one of the most significant aspects of jurisdictional disputes is in their revelation of the short-sighted view and limited loyalty of too many labor leaders. It is, perhaps, understandable that the A. F. of L. should fight the rival C. I. O. Typical of this fight is the boycott which the Brotherhood of Electrical Workers has for some years carried on against goods manufactured in

[14] *Id.* at 135; LASCH, BREAKING THE BUILDING BLOCKADE (1946) 98.
[15] T. N. E. C., MONOGRAPH 8, p. 55; LASCH, BREAKING THE BUILDING BLOCKADE (1946) 99.
[16] T. N. E. C., MONOGRAPH 8, p. 135.
[17] LASCH, BREAKING THE BUILDING BLOCKADE (1946) 99.
[18] T. N. E. C., MONOGRAPH 8, p. 134.
[19] United States v. Hutcheson, 312 U. S. 219 (1941).

plants organized by the C. I. O.[20] During the war this campaign was not pushed actively, but it is beginning to be revived now. However, since the C. I. O. has now succeeded in organizing some of the mass production plants, such as Westinghouse and General Electric, it is obvious that a fight of this kind might disrupt the construction industry and do serious damage to the whole national economy. Nevertheless, this type of boycott seems to be increasing rather than diminishing. It is now reported that the Carpenters are threatening to refuse to install window frames made in C. I. O. organized plants. The wisdom of carrying on any inter-union fight in public is open to serious question. It would seem to be clear beyond any question that it is short-sighted and unwise to carry the fight to the point of inflicting serious damage upon the industry and the public. It is even less understandable and justifiable when jurisdictional disputes are carried on between supposedly allied unions, rather than between rivals. The Hutcheson case involved a dispute between the Carpenters and the Machinists unions—both at that time members of the A. F. of L. It may require a bricklayer, a carpenter and a plasterer to install a new type of acoustical tile, because the unions of all three insist on the right to do that kind of work.[21] The whole matter reaches its most absurd extreme in the case of a few large urban locals of unions which refuse to handle materials that have been fabricated by members of the very same union if they belong to another local.

The consequences of such disputes are inefficiency, unnecessary expense, and a decrease in labor productivity. The situation is summarized in the words of the T. N. E. C.: "Division of work among the trades in the building industry is not determined upon the basis of efficiency, as in manufacturing, but according to superior bargaining position."[22]

Wage rates in the building trades are generally reputed to be among the highest in any employment, and the statistics will bear this out. However, the conclusion does not automatically follow that these are a cause of high costs. On the contrary, there seems to be little relation. One of the principal reasons for the high hourly rates in the building trades is the fact that employment is seasonal and uncertain, and it is generally accepted in the trade that a worker must earn enough in a few summer months to live on during the entire year.[23] The annual earnings of construction workers are far from high in comparison with the annual income of those in other industries.[23a] Also important is the fact that the proportion of skilled workers in building construction is probably higher than in any other industry.[24] In any event, the most significant factor in determining labor cost is not the wage rate but the productivity of labor. The T. N. E. C. found little relationship between wage

[20] See United Electrical R. & M. Workers v. International B. of E. Workers, 115 F. (2d) 488 (C. C. A. 2nd, 1940); *cf.* Allen Bradley Co. v. Local No. 3, I. B. E. W., 325 U. S. 797 (1945); and see RESTRAINTS OF TRADE AND BOYCOTTS, pamphlet issued March 26, 1946 by National Electrical Manufacturers Assn., 155 East 44th St., New York, N. Y.

[21] LASCH, BREAKING THE BUILDING BLOCKADE (1946) 99.

[22] T. N. E. C., MONOGRAPH 8, p. 135.

[23] *Id.* at 53.

[23a] See LASCH, BREAKING THE BUILDINNG BLOCKADE (1946) 94.

[24] T. N. E. C., MONOGRAPH 8, p. 51.

rate and labor cost.[25] Some cities with low wage rates had high labor costs, while other cities in which the wage rates were higher had lower relative labor costs. It is doubtful that the high hourly wage rates in the building trades bear any particular relation to costs in general. The important factor in determining labor costs is labor productivity, and the vice of resistance to labor saving methods and of jurisdictional disputes is that they seriously impair the productivity of labor.

Another factor in the situation which tends to be overemphasized because of its sensational character is the existence of so-called racketeering in unions. It is certainly true that there are racketeers—of the old time blackjack and six shooter variety—in some labor unions. Further, the building trades unions appear to have a disproportionate share of such characters.[26] However, in the very nature of the matter it is impossible to reach reliable conclusions about this, at least without a much more extensive investigation than has yet been made. One informant, who had spent many years in the building trades unions and claimed to have been present personally at many "payoffs," stated that all the racketeers and gangsters he had known about in the labor movement had been subsidized by employers. The employers' purpose, of course, was to keep the union in line and avoid trouble for themselves. The fact that union members might be swindled, or other employers made the victims of extortion, either was of no consequence or was actually thought desirable. The task of an employer who wishes to keep a particular man or faction in control of one of the building trades unions is made easier by the fact that many of them are relatively undemocratic in organization. The dominant Carpenters' union is practically the personal property of its dictator, Big Bill Hutcheson.[27] Big Bill himself has been accused of some very unsavory practices by some of his own locals,[28] but he seems equally complacent about such charges whether they are made against himself or against other officials of his union.[29]

Since it is impossible to know exactly how much racketeering there is in the building trades—as well as very difficult in some cases to draw the line between racketeering and simply hard-boiled politics—it is impossible to estimate just how significant such practices are in contributing to the cost of building. However, any secret racketeering which takes a substantial part of the building dollar is bound to be reflected somewhere in the known costs. There is nothing to indicate that ordinary racketeering is a significant factor. To the degree that it exists, it is probably more important in its indirect costs—in maintaining inefficient and unproductive methods, and fomenting short-sighted disputes over areas of craft jurisdiction.

THE BUSINESS UNITS

The various labor practices which seem to contribute to the high cost of construction all have origins or counterparts in business practices. Most of the members

[25] *Id.* at 49.

[26] See, *e.g.*, story in N. Y. World-Telegram, June 24, 1946, p. 5, and N. Y. Post, same date.

[27] See FORTUNE, *supra* note 5, at 119; Victor Riesel, *Labor News and Comment*, N. Y. Post, April 30, 1946, p. 30.

[28] See N. Y. Times, April 28, 1946, p. 35.

[29] See FORTUNE, *supra* note 5, at 121.

of the industry are as convinced as labor that they are operating in a limited market, and that they can best serve their own interest by getting as much as possible out of that market for themselves, rather than by attempting to expand the market. As building trades unions frequently oppose labor saving devices and methods, so the building trade employers generally oppose any methods or materials that will save expense and threaten to reduce profit.

One of the greatest sources of inefficiency in the building industry is the incredible variety of sizes and designs in use for every part of any structure. The simple matter of an ordinary interior door is carried in 200 to 300 different sizes and varieties. There are 8 different combinations of wood and steel door jambs and frames, each one of which may be set for several different ways of opening and used for different thicknesses of door. Thus there are 192 possible variations of the door and jamb, each of which is subject to any one of 50 different finishes, and may be used with one of at least 20 different types of lock. There are several hundred different varieties of molding that may go around the door. Thus there are several *million* different ways of trimming and installing a door opening in an ordinary house.[30] Obviously there is not going to be any mass production of this item under these circumstances. On the other hand, it is extremely doubtful that the numerous minor differences in style are of any real importance to the inhabitant of the house. They do, however, require additional middlemen, larger stock inventories, higher prices, and therefore greater profits for some members of the industry.

The same thing is true of most of the items which go into an ordinary building. Even bricks come in different sizes—75 different sizes, in fact, before the Bureau of Standards recommended the reduction of this number.[31] Similarly, there are more than 1,000 varieties of brass lavatory and sink traps; and more than 1,200 different sizes of slate roofing.[32] There are 125 varieties of metal lath; more than 1,200 stock patterns of lock hardware; some 19,000 kinds of valves and fittings; 193 types of paint brush; and 150 strengths of window glass.[33]

However, the greatest variety of all, and perhaps the most wasteful, is in the basic pattern of space arrangement. In the average construction job, each individual piece of wood is cut individually for one particular place in the structure. Plumbing, wiring, trimming, everything is done by hand on the job according to individual specifications for that one structure. Room heights, wall thickness, window and door openings, room lengths and widths, all vary from house to house, and often within a single house, by insignificant amounts, often a fraction of an inch. This use of fractional dimensions and unlimited variations in sizes does not add to the individuality of homes; it merely makes any approach to mass production of materials impossible and thus keeps the whole price structure on a high level.

The obvious alternative to these practices is the adoption of standards of dimensions and sizes for materials and basic design. Several proposals have been made

[30] T. N. E. C., MONOGRAPH 8, p. 61.
[31] *Id.* at 138.
[32] *Ibid.*
[33] LASCH, BREAKING THE BUILDING BLOCKADE (1946) 160.

for the adoption of a basic modular unit to serve such purpose. If four inches were adopted as the smallest unit of measurement (instead of the fractions now in use) and four feet as the smallest unit of length for room measurement, the man designing his own home would still have a literally infinite variety of possibilities open to him. However, the savings in costs of materials would reduce the total cost of his home by 10 per cent or more.[84] The American Standards Association is making an effort to secure the adoption and use of some such modular units in this field, but so far its attempt has met with little success.

One of the most important reasons for the lack of success in securing any agreement on such a matter is the opposition to every attempt by one or more of the numerous groups which taken together are said to compose the "construction industry." Actually this so-called industry is made up of numerous small separate enterprises, independent of one another in the performance of their work. In fact, the number of different enterprises which enter into the construction of an ordinary house is almost as great as the variety of materials and fixtures. Without going back to the extractive industries, nor including the collateral, but necessary functions such as real estate title transfer, gas, electric, telephone, sewage and water service, these are some of the businesses participating in the actual construction of your house:[85]

Manufacturers of—	Wholesale and retail distributors of—	Contractors for—
Dressed lumber	Lumber and millwork	General construction
Flooring	Brick	Excavating
Laths	Structural steel	Concreting
Sash, doors and blinds	Hardware	Masonry
Wall board	Heating equipment	Carpentering
Insulation	Plumbing equipment	Plumbing
Wall paper	Paint and glass	Heating
Building brick	Wall paper	Electrical installations
Roofing tile	Electrical supplies	Plastering
Sewer pipe	Gas appliances	Sheet metal work
Fire brick	Construcion equipment	Tile-setting
Cut stone	Building supplies	Painting
Cement		Paperhanging
Wall plaster		Floor-finishing
Window glass		Linoleum
Lime		Landscaping and sodding
Gypsum board		
Wrought iron		
Cast iron		
Plumbing fixtures		
Paint		
Copper wire		
Lighting fixtures		
Hardware		
Screen		

[84] T. N. E. C., MONOGRAPH 8, p. 139.

[85] *Id.*, from various tables.

Perhaps, in a particular case, two or more of these functions will be performed by a single manufacturer, distributor or contractor. However, these enterprises represent the typical organization of the construction "industry." Except for a few manufacturers of materials, the business enterprises involved are small and limited in resources. When last counted, in 1939, there were over 215,000 construction contractors of various kinds in this country.[36] Of these, less than 15 per cent did a total annual business over $25,000; more than 85 per cent did a total annual business under $25,000.[37] The typical business unit in the construction field is small and limited in resources. Some, of course, are larger than others; but there is no such thing anywhere in the so-called housing industry as a big corporation manufacturing the end product—a house.[38]

Thus on the business side, what is called the construction industry is made up of small units far outnumbering the numerous craft unions among the employees of the building trades. These units group themselves together into innumerable small functional segments, much like the craft unions, and each small segment guards its own small area of business jurisdiction as jealously as any of the unions. The jurisdictional disputes between business groups are usually not so well known as those between unions, for they are not usually carried on in public. Nevertheless, such business tactics are probably more important than the corresponding policies of labor so far as increasing the cost to the consumer is concerned. In the building business the established lines of distribution are rigidly maintained. In the plumbing segment, for instance, sales are from manufacturer to jobber to contractor. It is quite impossible for an ordinary consumer to buy plumbing equipment except from the contractor who will charge both for his markup on the sale of the goods and his charge for installation.[39] The only competition in the sale of such equipment has, in the past, been the mail order houses. However, this competition has been nullified by the practices of the contractors who increase their charges for installation sufficiently to swallow up any economy resulting from the cheaper purchase price.[40] Any jobber or retailer who attempts to sell direct to a consumer is quickly brought into line by the pressure of his suppliers who refuse to sell, or deny him trade discounts, so long as he does not respect the established jurisdictional lines.

These same practices apply to many other building supplies and materials. One professional engineer, a veteran of World War II, desired to make some necessary repairs to his house after release from the service. He wrote to a manufacturer of oil burners enclosing a check and requesting shipment when one became availabl. The company replied referring him to its local distributor. He called the local distributor and was told that it did not sell to anyone but authorized dealers. He then went to the dealer, who advised him that he could buy an oil burner, but only if he also bought all the controls and auxiliary equipment and paid for installation

[36] U. S. BUR. OF THE CENSUS, STATISTICAL ABSTRACT OF THE UNITED STATES, 1944-45 (1945) 902.
[37] *Ibid.*
[38] FORTUNE, *supra* note 5, at 102.
[39] T. N. E. C., MONOGRAPH 8, p. 65.
[40] *Ibid.*

by the dealer. Being fully qualified to make the installation himself, and desiring the economies that would result, the engineer went back to the distributor and asked to be listed as a dealer in order to qualify for the purchase of a burner without installation. He was firmly informed that the distributors had dealers in each part of the territory, that each dealer was permitted to operate in a certain area only, and that no new dealers were being added, as dealers were protected against competition. Investigation revealed these practices to be standard in the oil burner field. Similar experiences resulted from attempts to buy acoustical panels, and other materials for repairing his house.

Few consumers are engineers, or qualified to make their own repairs or installations. But such practices are extremely important in adding to the cost that all consumers must pay for housing, since the contractor who does do the construction or repair work faces the same situation as a home-owning engineer. Construction is unique in being the only *retail industry*. In no other industry does the producer buy his materials in small quantities and from retail distributors. In construction, the general contractors usually buy their materials just as any owner who wished to repair his own house would—from retailers or from installers who are combined retailers and subcontractors. Since the average retail markup on builders' supplies is approximately 50 per cent for the country as a whole,[41] the distribution system from the manufacturer to the contractor at least doubles the cost of the materials that go into a building.[42] Thus the established channels of distribution between the manufacturer of materials and the builder account for about one third of the cost of construction of dwellings. This is the cost of maintaining the established areas of business jurisdiction within the construction industry.

RESTRAINTS OF TRADE

The inefficiency in the construction industry arising from the lack of standardization of materials and arrangements may be due simply to indifference and lack of initiative (individual or other). But clearly the established channels of distribution and enterprise could not long be maintained without some organization or agreement among certain of the business units involved. This raises the question (perhaps "challenge" is the better word), What of the Antitrust Laws? Since the passage of the Sherman Act in 1890, it has been a principle of our law that every combination "in restraint of trade" is illegal. Are not such combinations in restraint of trade?

To understand this problem it is necessary to rearrange the terms. The statute says that every combination in restraint of trade is illegal. Like all other statutes, this requires application to specific cases, which involves interpretation by the courts. The Supreme Court in its application of this statute has reasoned that the cooperation of any two persons in a business enterprise is a combination, and that any contract or other arrangement that limits, in any way, the economic activity of any-

[41] *Id.* at 66. [42] LASCH, BREAKING THE BUILDING BLOCKADE (1946) 85.

one, to the degree that it limits also restrains trade. Since, in general, these things are legal, the Court says, they become illegal only when they are of such a nature that the courts may regard them as "unreasonable."[43] Therefore, the most nearly accurate statement of the law is that every combination which is illegal is in restraint of trade.

It is no mere play upon words to insist on this statement of the principle. There is no physical or economic phenomenon which can be identified as "restraint of trade." The phrase has a purely legal significance. Even those who are most insistent on the transcendental validity of certain moral principles concede that such statutory provisions as this mean only what the courts say they mean. Consequently it is easier to define "restraint of trade" by those actual combinations which the courts have declared to be illegal, than it is to set a standard of legality by reference to the purely verbal formula "restraint of trade." Naturally, this leaves the definition somewhat vague. However, the vagueness is not created by the definition, but by the facts; the definition merely recognizes the actual state of the law.

Thus, in the construction industry, as in all other industrial fields, there are certain practices which are clearly restraints of trade, there are other practices of doubtful legality, and there are a large number of practices which seem to be economically unjustifiable but are quite legal under present law.

The construction industry is distinguished by the disproportionately large number of restrictive practices in all three categories which flourish within it. Thurman Arnold as Assistant Attorney General stated: "There is no one industry that has suffered more under a multiplicity of restraints of trade than the building industry."[44] This conclusion is underlined by the statistics. During the past thirty years about 675 cases have been brought by the government under the Antitrust Laws. Of this number, 160, or approximately 24 per cent, have involved the construction industry.[45] No economic analysis is needed to demonstrate that this is a far greater proportion than the size and importance of that industry in the general economy would warrant.

However, in spite of the large number of cases in which particular restraints have been prosecuted, there is relatively little variety in the general forms in which the restraints of trade appear. There are probably less than a dozen generic types of restraint that have been important enough to receive judicial attention. Within these types, of course, there is tremendous variety of detail; as in negligence actions, each case presents some individual circumstances, but the general principles keep repeating. The principal restraints of trade found in the building trades are boycotts, price fixing in various forms, limitations on sales or production, and the use of patents to control the sale or use of products.

[43] Standard Oil Co. v. United States, 221 U. S. 1 (1911); United States v. American Tobacco Co., 221 U. S. 106 (1911). There is a large body of literature in legal periodicals discussing this doctrine, which is usually referred to as the "Rule of reason."

[44] ARNOLD, THE BOTTLENECKS OF BUSINESS (1940) 35.

[45] SEN. COMMITTEE PRINT No. 12, 79th Cong., 2d Sess. ("Antitrust Cases in the Construction Industry," September 12, 1946).

Thus, although the system of distribution for building materials is wasteful and uneconomic, it is not inherently in restraint of trade. There is nothing to prevent a manufacturer from selling, or promising to sell, his entire output to a jobber. In turn, there is nothing to prevent a jobber from dealing exclusively with one, or a few wholesalers; and it is perfectly legal for the wholesalers to refuse to sell to anyone except retailers. Of course, the retailers can, generally speaking, sell upon whatever terms they choose. (Even O.P.A. has had no authority to require sales at economically justifiable prices, but only to keep prices from rising more than a certain amount above previously established levels.) A restraint of trade arises only when a number of business units combine, either vertically or horizontally, to require the adoption or maintenance of such practices. Such an agreement, usually expressly, sometimes by implication, contains the threat of a boycott against the businessman who steps out of line. Such a combination is in restraint of trade whether it is composed of a group who are pledged to deal only with each other, and to boycott outsiders,[46] or of a group who attempt to force outsiders to observe established lines of business interest by threat of a boycott against, for example, manufacturers who sell directly to consumers.[47] The Supreme Court has, however, been careful to point out in such cases that the acts complained of might have been done with impunity by any of the individuals involved. "An act harmless when done by one may become a public wrong when done by many acting in concert, for it then takes on the form of a conspiracy, and may be prohibited or punished, if the result be hurtful to the public or to the individual against whom the concerted action is taken."[48]

It is beyond the scope of this article to attempt to list groups of cases which represent one or another type of restraint. The Department aof Justice has recently prepared such a summary of antitrust cases in the construction industry for the Senate small business committee (the printed report runs over fifty pages).[49] However, it would probably be no exaggeration to say that every type of restraint of trade mentioned here exists, or has existed, in every branch of the construction industry. Consequently, most of the cases that have reached the courts have involved several different restraints affecting a single commodity or group of business units.

Boycotts in support of the established channels of distribution have been most prominent in the fields of lumber and plumbing. In 1941, cases were brought against a number of lumber dealers associations, including the National Retail Lumber Dealers Association.[50] It was charged that these associations set up certain lists of dealers which were limited to so-called recognized, legitimate or qualified dealers. Manufacturers and wholesalers were required to market their products through the dealers on these lists or face the threat of a boycott by the members of the associations. Manufacturers or wholesalers who sold directly to contractors or builders

[46] Montague & Co. v. Lowry, 193 U. S. 38 (1904).
[47] Grenada Lumber Co. v. Mississippi, 217 U. S. 433 (1910).
[48] *Id.* at 441; Eastern States Lumber Assn. v. United States, 234 U. S. 600, 613-14 (1914).
[49] SEN. COMMITTEE PRINT No. 12, *supra* note 45. [50] *Id.* at 29 *et seq.*

were boycotted the same as those who sold to retail dealers not on the approved lists. In addition, some of the associations allotted the territory within which each approved dealer might do business, and competing dealers were not permitted to encroach upon it. The defendants in most of these cases pleaded nolo contendere and were fined.

In the plumbing field, the Department of Justice reported, there are two methods of distribution: the old-line or restricted system in which boycotts are used at each stage of the system to maintain established channels, and the direct-to-you method in which the manufacturer sells to the consumer.[51] Under the old-line system, the manufacturers sell only to jobbers, these jobbers sell only to master plumbers, the master plumbers refuse to install plumbing not sold by themselves, and the unions refuse to work for master plumbers who do install any plumbing not sold in this fashion. The manufacturers of 80 per cent of the plumbing supplies made in this country, agreed to boycott mail order houses, cooperatives, and other direct-to-you outlets, thus effectively preventing anyone from getting plumbing installed more cheaply by cutting out some of the uneconomic steps in distribution.

Price fixing is one of the oldest and most widespread restraints of trade. Price fixing agreements have been held to be in restraint of trade since the early days of the Sherman Act, and the Court has consistently said that the resonableness or justification for the particular prices charged is irrelevant, as price fixing agreements are illegal per se.[52] In spite of this, various schemes for fixing prices have continued in use in the construction field. One of the least subtle and most popular of such schemes is the bid depository. Under this plan, a group of contractors, or other businesses, set up a central authority to which they submit all bids which they wish to make on any job. This authority then determines the price at which the bid shall be made and the contractor who shall get the job by some pre-determined system.[53] One method is to throw out the highest and the lowest bids, and average the rest, then add a certain amount for overhead and expenses, and establish that as the price for the job. Usually the jobs are awarded to different contractors in rotation, and the ones who are not "entitled" to a particular job must submit a bid higher than the one fixed by the central authority. In the two years before the war, injunctive decrees were entered forbidding the continuance of such bid depositories in the District of Columbia, Pittsburgh, St. Louis, New Orleans, and southern California.[54] The price fixing schemes involved in these cases related to plaster and masonry, tile, heating, piping and ventilating, electrical wiring and installation, and cut stone. Similar practices have prevailed in other branches of the building field, both before and since.

A more subtle method of price fixing is the use of a single formula by a number

[51] *Id.* at 50 *et seq.*

[52] See, *e.g.*, Addyston Pipe & Steel Co. v. United States, 175 U. S. 211 (1899); United States v. Socony-Vacuum Oil Co., 310 U. S. 150, 218 (1940).

[53] SEN. COMMITTEE PRINT No. 12, *supra* note 45, at 18 *et seq.*

[54] *Id.* at 18-20.

of ostensibly independent enterprises. The most widely used type of such formula is the so-called "basing-point system." The use of such a system eliminates the need for any formal meetings or any central agency to insure uniformity in quoted prices. Under the basing-point formula, prices are calculated by selecting a number of mills throughout the country as base points. The price to any consumer is the price at the base point nearest to that consumer plus the cost of rail delivery. All members of the industry are informed as to the base points to be used and the prices at such base points, and as to the railroad freight rates. Thus it becomes a simple matter to calculate the price for any point in the United States. This system has been in use in the cement industry for thirty years.[55] Under this system, the price of cement is the same for any particular consumer regardless of the plant or place from which it is purchased. During 1918-1919 the City of Los Angeles called for bids on cement on ten different occasions; and each time the bids were identical for all the companies bidding. Twenty-five years later, in 1943, the Navy Department took bids on cement for delivery at 18 different points stretched from Portland, Maine, to New Orleans. Out of a total of 206 bids at these 18 different places, 203 of the bids were identical to the last penny.

As business has become more sophisticated about the Antitrust Laws, restraints of trade which have been condemned by the courts have been modified or abandoned in favor of schemes which are less flagrant in contravening the law. One variant of the basing point system has been the use of zones, rather than base points, with an established price differential for each zone. Another method of avoiding competition without the necessity for a formal mechanism to fix the prices, is the acceptance of one firm in an industry as the price "leader," with either express or tacit agreement among the others to follow any changes and adhere to any prices set by the leader. One of the most sophisticated of all restraints of trade is the use of published statistical information to achieve uniform pricing or sales policies. The gathering and dissemination of factual trade information is, of course, a perfectly legitimate activity. There are even situations in which general publication of price information may be conducive to competition (as in the case of stock market prices). However, such information may be, and often is, used to reduce or suppress competition. Thus publication of price information by a trade association, the members of which are pledged to "cooperation" may imply an obligation on the members not to deviate far from the published prices. No rule of thumb can be formulated to distinguish between legitimate publication of trade information and the use of statistics as a disguised form of trade restraint. However, when the information published is of a kind which businessmen would normally not reveal to one another, there is at least the basis for an inference that the underlying motive may be an improper one. An example of such activity is the publication by a branch of the Southern Pine Association of statistical information showing every order taken by each mill, the details of the items sold, the prices received, and the territory to which shipment was made.[56] The Department of Justice dryly labels this "excess statistics."[57]

[55] *Id.* at 52 *et seq.* [56] *Id.* at 24. [57] *Ibid.*

Another form of restraint in which statistics are used is the establishment of "quotas" or limits on the production or sales of the members of an economic group. Such quotas can, of course, be effective only when they are based upon rather complete statistical information. When they are effective, they can be used to reduce competition to any desired level or to eliminate it completely. Thus, during the depression, the Western Pine Association adopted a maximum production limit of 37.5 per cent of capacity for all its members.[58] Since the members of this association produced more than 80 per cent of all soft pine in the western states, it is apparent that such a quota would have a substantial effect upon the market. An example of a quota on sales, rather than production, is a scheme used by the Southern California Marble Association. Each member of the association was required to report to the secretary the total amount of business done during a certain period of time. On the basis of this information, the marble business of southern California was divided on a pro rata basis among the members. Each member was given a quota comprising a definite percentage of the total business in the area, and each agreed to limit his business to the quota set for him.[59]

Those who believe that there is more profit to be made by restraint of trade than by competition are constantly searching for a cloak of legality in which to clothe their schemes. The cloak that has been most widely used for this purpose is the patent license agreement. Such devices are used to control the volume of output and the price level in many branches of the construction industry, including glass, insulation, plaster and wallboard, plumbing, heating, electrical supplies, and many other special items.[60] In the mineral wool business an elaborate licensing and royalty system was set up whereby a limited number of companies were permitted to enter the field. The royalties collected were used almost exclusively for policing the system by prosecuting competitors of licensees, who were accused of infringement. The patent used was obviously based on flimsy claims of novelty, and after twelve years of litigation it was finally declared invalid.[61] However, for twelve years this invalid patent was used to restrict production and maintain prices of a new and essential building material which could greatly contribute to the comfort and economy of heating of the average house. Furthermore, unless some litigant with the patience and money necessary to fight such a case through the courts for long expensive years challenges the system, such a restraint might continue indefinitely since there is doubt as to the right of the government to challenge the validity of a patent in an antitrust action. The government may, however, attack a scheme of licensing set up under a valid patent on the grounds that it is primarily directed to control of the market by price fixing, or other means, rather than to commercial exploitation of the patent.[62] If the court finds, as it did in the Masonite case, that the patent is being used merely as a cloak for restraints of trade, then the court will enjoin the restrictive system, regardless of the existence of a patent.[63]

[58] *Id.* at 26. [59] *Id.* at 20. [60] *Id.* at 11. [61] *Id.* at 17.
[62] Standard Sanitary Mfg. Co. v. United States, 226 U. S. 20 (1912).
[63] United States v. Masonite Corporation, 316 U. S. 265 (1942).

It must be apparent from even this cursory view of the restraints of trade most prevalent in construction that practices which are clearly illegal shade imperceptibly into practices which are questionable, and on over into practices which are quite legal under prevailing concepts. Boycotts and price fixing are the most easily distinguishable of the restraints of trade, but even these have variants of doubtful legal status. The lines between legitimate and illegitimate use of statistics and patent licensing agreements are extremely vague. In addition there are various trade combinations which do not fall into any of the usual categories, but which seem to lie, at best, on the borderline of legality. One of the most interesting of these involved an unusual twist to the usual price fixing scheme. This plan was devised to meet the temporary crisis of the imposition of an O.P.A. ceiling on a certain group of contractors. O.P.A. enforcement officials noticed that after the ceiling had been set the majority of jobs were taken at substantially less than the ceiling price. This was so unusual as to arouse suspicion. Investigation revealed that while O.P.A. was gathering the information on which to base its ceiling order, the trade association representing these contractors had been very busy. Dozens of letters were sent out to all of the contractors in that business in the O.P.A. region. They were informed that an investigation was being made by O.P.A., and were told to show only their highest priced jobs to the O.P.A. investigators. Meetings were held at which the trade association secretary instructed members how to fill out O.P.A. questionnaires, and a scare campaign was conducted among non-members to make sure that they played ball with the association. The conspiracy was successful; the ceiling price arrived at by O.P.A. was so high that it imposed no real limit on the operations of the contractors at all. It is very doubtful that this particular scheme is legal; but the fact must be noted that, in spite of investigation, this association has not been prosecuted.

A more respectable form of combined activity is the establishment of industrial codes. One of the best known is the National Electrical Code, which is drafted by a committee composed of representatives of manufacturing and insurance companies. This code is generally adhered to by both manufacturers and installers of electrical equipment, and it has a quasi-official status with most city building inspectors. Most of the provisions of this code are probably salutary, and it may have improved the quality and safety of the electrical apparatus sold generally. Nevertheless, the fact remains that it represents trade legislation by a group of private concerns. Large manufacturers such as General Electric and Westinghouse have great, if not dominating, influence in such an organization. It has been claimed that this influence has been used to secure code provisions that favor the installation of equipment manufactured by the dominating companies, or that prevent the use—and consequently the development—of new and more efficient devices. Recently the manufacturers of certain types of fluorescent lighting equipment have claimed that provisions have been inserted in a new draft of the code for the specific purpose of preventing the installation of such (cold cathode) fluorescent lighting in competition with the types

of equipment now being used. Perhaps such practices violate the Antitrust laws; this has never been decided, and the Department of Justice itself seems uncertain. But, regardless of legal status, such a combination represents another element of rigidity in the industry, is one more influence against improvement, efficiency and lower costs.

In theory the only proper way to establish codes of construction standards is by the action of some responsible political unit which will be concerned solely with the public welfare. In practice, the building codes of general application are formulated by municipal government; but in many cities they show small concern for the public welfare. Ostensibly intended to enforce minimum standards of public safety and health, most building codes are in fact the means of preventing the introduction of new methods or materials in construction. The codes should establish minimum requirements as to strength, sanitation and fire resistance, and manufacturers and builders should be free to meet those requirements in the most efficient and economical manner they can devise. Instead, the codes are usually drafted to require the use of particular materials or methods in order to favor the special group interested—sometimes the manufacturer or distributor, sometimes the union or craft workers involved.[64] Thus the codes reflect the political influence of the organized business and labor groups within the building trades, rather than the best judgment of the engineering profession. Since municipal building codes themselves have the force of law, they cannot be called restraints of trade. Nevertheless, they make excellent substitutes for restraints of trade in many cases, and are undoubtedly, in some of those cases, intended for exactly that purpose.

At quite the other extreme of legality from the building codes are the undisguised racketeers. In this field, only the racketeers observe no jurisdictional lines; they work the labor and the employer side of the street impartially. Probably the honest contractor is himself just as much the victim of the racketeers within the business as the customers are. Complaints have been made of "Employers' associations" which took a percentage cut from all members on every job performed. Contractors who refused to join were subjected to sabotage, violence or labor trouble. Those who complain about such organizations do so furtively, and often in real fear of physical harm. Investigation of one such association in Brooklyn disclosed that the active head was an individual who had just been released from prison after serving a term for extortion, and who was reputed to be working in cooperation with some of the best known and most feared gangsters in New York. In this case, the racket involved the control—through bribery, corruption and terrorism—of the labor union in that field. Usually, although not always, racketeering on the business side involves the connivance or corruption of union leaders; and racketeering in unions exists with the connivance of employer groups. As has been remarked, there is no accurate information as to the extent of racketeering in this industry; and by its very nature it is usually hidden or disguised. However, without in any way mini-

[64] LASCH, BREAKING THE BUILDING BLOCKADE (1946) 105 *et seq.*

mizing the undesirable and criminal nature of such activities, it is doubted that they are of more than secondary economic significance.

More numerous and of greater importance than the cases involving primarily force and violence, are the situations in which groups of employers combine with labor unions to use the economic power of the union to enforce some restraint of trade. In the recent Allen Bradley case[65] local manufacturers of electrical equipment and local contractors in New York entered into closed shop agreements with the local union of electrical workers. The agreements covered the entire New York City area. The manufacturers agreed to confine their sales to contractors who had such agreements with the union, the contractors agreed to purchase only from manufacturers who had such agreements with the union, and the union agreed to permit the installation of equipment manufactured in New York only. The result was a complete monopoly in the electrical field in New York for all three groups. Electrical equipment manufactured outside the New York area was completely excluded, even though manufactured by members of other locals of the same union. Wages and prices increased—and the consumer paid. The Supreme Court made it clear in this case that such practices are restraints of trade. Although union activities are normally not within the operation of the Antitrust Laws, when unions combine with nonlabor groups to create monopolies or restrain trade, the entire combination is within the ban of the law. There can be no doubt that this rule applies whether the conspiracy uses economic or physical force, or both. All the cases in which employers groups combine with unions to raise prices, limit work, eliminate competitors, or impose other illegal restrictions, are restraints of trade and prohibited by the Antitrust Laws.

On the other hand, the activities of labor unions alone do not, under present law, constitute restraint of trade. That this is the law has been made perfectly clear by the Supreme Court in a series of cases, beginning with the Apex case in 1940[66] and coming down to the Crumboch case in 1945.[67] This has not always been the law, and there are many who feel that this should not be the law. But until changed by Congress or the Supreme Court, this most emphatically is the law. In the Hutcheson case, regarded by the Antitrust Division as a "landmark" because it was such a definite setback to the campaign against restraints in the construction field,[68] the Carpenters' union under Big Bill Hutcheson demanded that the Anheuser-Busch Company employ millwrights instead of machinists to install certain machinery in their plant. Both millwrights and machinists were members of unions affiliated with the A. F. of L. Nevertheless, the Carpenters' union went on strike against the company to force it to accept millwrights for the job, and finally organized a boycott of union men all over the country against the products of the company. Action was begun by the Department of Justice against Hutcheson and the Carpenters'

[65] Allen Bradley Co. v. Local Union No. 3, 325 U. S. 797 (1945).
[66] Apex Hosiery Co. v. Leader, 310 U. S. 469 (1940).
[67] Hunt v. Crumboch, 325 U. S. 821 (1945).
[68] SEN. COMMITTEE PRINT No. 12, *supra* note 45, at 40.

union on the theory that their activities constituted restraint of trade. The case went to the Supreme Court which held that since the case involved a labor dispute it was not within the reach of the Sherman Antitrust Act.[69] Perhaps even more extreme on the facts is the recent Crumboch case.[70] In that case, a particular employer incurred the enmity of a union by operating during a strike and causing (according to the union view) the death of a union member. After the strike was settled, the union refused to permit any of its members to work for the employer, refused to permit any other employers to deal with him, and eventually forced the employer out of business altogether. The employer sued the union under the Sherman Act. The Supreme Court held that the acts of the union were not restraints of trade under the Sherman Act, although it said plainly that the same acts done by a nonlabor group would have been illegal, and that the acts would have been illegal if the union had been acting in combination with a nonlabor group.

This decision will certainly strike those unfamiliar with the history of the Antitrust Laws as being quite incomprehensible. Whether it is justifiable legally or socially, lawyers and others may and do disagree. But the decision does not represent simply an irrational prejudice in favor of labor unions. When the Sherman Act was passed in 1890 it contained no reference to labor as such. Any combination of workingmen which interferred with a business might be considered in restraint of trade. Since the only effective weapon labor had was the strike, and since the strike depended for its usefulness on interfering with normal business activities, every strike was a restraint of trade if the business involved was in interstate commerce. There were in fact many cases against labor unions under the Sherman Act, and the principal question considered by the courts in most of them was whether or not interstate commerce was affected. As a result of this situation, labor came to regard the Sherman Act as an anti-labor law, and the act did seem to be used against labor more often than against the business "trusts" at which it had been aimed. Consequently, in 1914 Congress passed the Clayton Act declaring that human labor was not a commodity, and that a labor organization carrying out its legitimate objectives should not be considered a combination in restraint of trade. In the words of the Supreme Court, "Congress in that Act responded to the prolonged complaints concerning applications of the Sherman law to labor groups . . ." but, "This Court later declined to interpret the Clayton Act as manifesting a congressional purpose wholly to exempt labor unions from the Sherman Act."[71] Again labor went to Congress to protest that the Antitrust Laws were being used against labor rather than against business combinations, and Congress passed the Norris-LaGuardia Act emphasizing the exemption granted to labor in the Clayton Act and further restricting the power of the courts to interfere with the activity of labor unions. Finally the court came to the view that labor union activities, carried on independently of any nonlabor group, are not subject to the Antitrust Laws. The

[69] United States v. Hutcheson, 312 U. S. 219 (1941). [70] Hunt v. Crumboch, 325 U. S. 821 (1945).
[71] Allen Bradley Co. v. Local Union No. 3, 325 U. S. 979, 803, 805 (1945).

Court says, "It was an interpretation commanded by a fair consideration of the full history of Antitrust and labor legislation."[72]

Having noted the prevalence of restraints of trade in nearly all branches of the construction industry, the question still remains as to their relative significance. If restraints are thought of in naïve terms as any economic shackles interfering with efficient production, it is obvious that they represent the crux of the problem. But keeping in mind that restraint of trade is a technical legal term referring to certain specific types of activities, the conclusion is not so clear. In this latter view, the question is really how effective the Antitrust Laws are, actually or potentially, in reforming the primitive and inefficient practices of the construction industry. The answer to this question seems to be largely conditioned by one's attitude towards the Antitrust Laws in general. Those who are unsympathetic to the Antitrust Laws tend to underestimate their importance and effectiveness; those who believe in them tend to everestimate their power. Mr. Arnold gives the impression that a vigorous enforcement of the Sherman Act is a remedy for most of the faults of most industries.[73] Actually he did succeed in accomplishing some rather impressive results in a widespread enforcement drive in the construction field. In particular localities the prices on lumber, sand and gravel, and electrical equipment dropped as much as 20 per cent when the Antitrust Division attacked bid depositories and other restrictive schemes.[74] But Arnold himself realized that results could be obtained in construction through Antitrust enforcement only by simultaneous prosecution of the various combinations on a nation-wide scale.[75] Even then the results are not permanent, but last only so long as the drive for enforcement continues.[76] In fact, the enforcement drive undertaken by Arnold was short-lived and the results appear to have been completely lost.[77]

There are additional difficulties in the use of Antitrust as an instrument for reformation of the construction industry. Most of the states have Antitrust Laws, but as a general rule they are completely dead letters, either because the statutes are loosely drawn, the administration is indifferent, or the courts are unsympathetic. On the other hand, the federal laws apply only to restraints of interstate commerce. But in the construction industry, many of the activities are either local in nature or of such an indirect relation to interstate commerce that it is difficult to persuade the courts that they do actually affect commerce sufficiently to come within the scope of the federal laws. At different times, and in various situations, the personnel of the Department of Justice or the Antitrust Division may be inadequate or unwilling to prosecute all of the numerous restraints which exist. In addition, business is becoming increasingly more sophisticated about the Antitrust Laws, so that the violations are becoming more subtle and more carefully concealed. This means that the proof upon which to base enforcement is becoming increasingly difficult to get,

[72] *Id.* at 806. [73] ARNOLD, THE BOTTLENECKS OF BUSINESS (1940).
[74] Arnold, *Antitrust Law Enforcement* (1940) 7 LAW AND CONTEMP. PROB. 12.
[75] *Id.* at 17. [76] *Id.* at 19. [77] LASCH, BREAKING THE BUILDING BLOCKADE (1946) 169.

that a larger staff is necessary to enforce the laws, and that in at least some cases of violation enforcement will be impossible because of lack of adequate proof.

The most important objection to a principal reliance on law enforcement as a cure for the present situation is that many of the practices which are economically least justifiable are either plainly legal or doubtfully within the proscription of the laws. The economic significance of a practice is, after all, independent of any legal judgment as to whether or not it is a restraint of trade. It is not enforcement of the Antitrust Laws that makes an industry efficient. On the contrary, it is the efficiency of an industry in satisfying the needs of the people that makes enforcement of the Antitrust Laws unnecessary. Restraints of trade, like racketeering, flourish in scarcity industries. The important fact about the construction industry is not that its practices do or do not fall within certain categories of legality, but that as an industry it is committed to a policy of high unit cost and profit and limited production, rather than mass production and low unit cost and profit. The cardinal sin of the industry is not that its policies are illegal, but that they are inefficient.

In the final analysis, of course, all these things are related. High costs mean a limited market, fewer sales, and therefore the necessity for higher profits per unit, which in turn maintain the costs. On the other hand, low prices mean a mass market, which is the prerequisite to mass production with the greater efficiency, lower costs, and larger total profits at lower unit prices which accompany mass production. The existence of restraints of trade, racketeering, and most of the other troubles which plague the industry is largely the result of the economic conditions prevailing within it. These things breed in scarcity industries. The cause of the scarcity does not determine its effects. Rackets flourished in the liquor business during prohibition; the black market sprang up in rationed articles during the war; rackets are now burgeoning in business fields such as automobiles and washing machines, where they are directly traceable to the present condition of scarcity of supply. Housing has always been a scarcity industry—it is only slightly more so today. We have never produced enough houses cheaply enough to satisfy even the minimum needs of the population. The results have been those inevitable concomitants of all scarcity situations—restraints, rackets, higher costs and higher prices. Law enforcement in this situation is both desirable and important, and it will improve conditions. However, that alone is not sufficient to secure permanent and fundamental improvement in the functioning of the industry.

THE FINANCIAL HIERARCHY

Among the distinguishing characteristics of the construction industry is not only its division into a multiplicity of small, restraint-ridden, inefficient operating units, but also the fact that, unlike other industries, these units neither own their own products nor direct their own operations, and so can hardly be called independent. It has been too little noticed that the construction industry carries an incubus of financial supervision and control borne by no other important economic group. It

is true that banker control of American industry has been increasing for some years,[78] but the control has generally been as to financial or other broad policies. In the field of housing construction the control of the financial interests covers every detail from the choice of the site location to the kind of exterior paint that may be applied to the finished house.

The reason for this condition is obvious. Few contractors, and far fewer purchasers can afford to pay for the construction or purchase of a house in cash. In order to construct even a single house, it is necessary for the average contractor to secure credit to buy materials, pay workmen, and hire subcontractors. Although this credit is usually for a short term, if more than one or two small houses are involved, the total amount of money will be quite substantial. The home "owner," on the other hand, usually does not purchase more than a single house, but he requires a very long term credit to give him sufficient time to pay off the entire purchase price. In both cases, the necessary credit can normally be obtained only through a financial institution. In extending such credit, the universal practice is for the lending institution to take a mortgage on the house as security for the loan. Unless the house meets the approval of the mortgagee in all respects, no loan will be made, and no house will be built or bought.

An interesting example of the extent and exercise of this financial control is a recent case brought by the Antitrust Division of the Department of Justice in New York.[79] In this case it appeared that more than three dozen of the largest financial institutions in the United States, all of them interested in investment in New York City mortgages, had formed an organization to gather and disseminate information and coordinate their activities with respect to such mortgage lending. Complaints about the control exercised by this group led to an investigation and a recommendation by a Grand Jury that the Department take civil action to eliminate the influence of this organization. Since the case has not yet gone to trial, and since the author presented the case to the Grand Jury, it seems proper to confine the discussion to the allegations of the Complaint. It is, however, no breach of confidence to say that there is a mass of documentary evidence, some of it rather sensational, to support each allegation.

The Complaint in this case states[80] that the members of the organization are the dominant figures in the New York mortgage market—where the loans made each year are more than $200 million, and the total loans outstanding run into many billions. The institutions which were not formally members of the organization were persuaded to follow the policies and practices adopted. The purposes of the organization were: to prevent competition for mortgages; to fix minimum interest rates; to establish uniform appraisals between the members; to exclude minority

[78] T. N. E. C., FINAL REPORT (1941) 13.

[79] United States v. The Mortgage Conference of New York, *et al.*, Civil Action No. 27-247 in the District Court for the Southern District of New York. Complaint filed August 6, 1946.

[80] The allegations of the Complaint are stated here in summary form to show their bearing on the subject of this article. This summary is not intended as a legally precise statement of all the allegations.

racial and national groups from certain areas; to fix minimum rents; and to limit new construction that might compete with buildings on which the members already held mortgages. In carrying out these purposes, the Complaint states, the members of the organization set up an elaborate organization to collect and maintain records, and enable them to exchange information concerning their investments in mortgages and applications for mortgages. The records kept by the organization included detailed maps of the city showing all areas in which any Negroes or Spanish speaking persons (identified on the maps as "Other non-whites"[81]) resided, and the organization used its influence to keep these minorities within such ghettoes. It appears from the Complaint that the organization was successful in carrying out its purposes, that competition for mortgages was substantially reduced, interest rates maintained, and that the erection of many hundreds of apartment buildings was successfully prevented.

This Complaint is, of course, filed on the theory that these practices are restraints of trade and can be prevented. However, the illegality lies not in the nature of the things done but in the conspiracy to do them. Assuming that all cooperation between the various financial and real estate interests could be prohibited or prevented, the degree of control and the effect of the influence of these interests would be changed very little. Builders and buyers would still be dependent upon financial institutions for credit. And the control given by this credit would be—as it is in many places without such conspiracies—exercised to oppose change in method or design, to maintain slums and oppose urban planning, to maintain credit costs out of the reach of the mass of wage earners, and to lobby against all progressive housing proposals.

The most competent and comprehensive recent analysis of the construction industry is the brilliant book by Lasch, "Breaking the Building Blockade." That author reaches the conclusion that most of the blame for opposition to any innovation in the construction industry must be placed on the bankers.[82] They feel, he says, that any radical change in house building may make present houses obsolete and so impair their investments; and that any large reduction in costs would bring down the value of existing real estate, and thus threaten them even more. Since the banker must approve of the plans before any money is actually spent on construction, it is obvious that such an attitude is an extremely potent force in preventing any departure from tradition.

The same motivation lies behind the opposition of financial interests generally to elimination of slums and to scientific city planning. When a neighborhood begins to deteriorate, for any reason, the rental value of the property goes down. In order to maintain income from such property, the owners usually forego repairs and improvements, and subdivide the property into smaller units so that more tenants can be accommodated. Thus lower rentals are charged but total income from the property is maintained. However, the failure to maintain the property, plus the crowded

[81] See PM, August 7, 1946. [82] LASCH, BREAKING THE BUILDING BLOCKADE (1946) 166.

condition, causes further deterioration of the neighborhood and further depression of the rental. So the process continues, until a bottom has been reached and a slum created. During this process the income producing ability of the property is maintained, so the property may actually increase in economic "value" although its physical utility has almost vanished.[83] Thus the financial and real estate interests acquire a large stake in maintaining the slums and opposing any attempt at city planning or reform by any method other than buying the slums at exorbitant and inflated prices.

Next to archaic methods and uneconomic distribution systems, the maintenance of such inflated values and of high interest rates is probably the most important factor in maintaining the high cost of housing. This is true as well of rental housing as of occupant owned housing. A study of 39 New York apartment houses before the war showed a variation in profit and loss from 31 per cent net loss to 32 per cent net profit.[84] The apartment house which showed the greatest loss had a much higher rent per room and a lower rate of vacancy than the one which showed the highest profit. The profitable one had lower relative operating expenses. However, the big difference was in the per cent of annual income which went for interest on the mortgage. The unprofitable apartment paid 44 per cent of its income for interest, while the profitable one paid only 15 per cent of its income. The range of income paid for interest ran from 6 per cent to 63 per cent, and the average was 29 per cent. In general, the bankers get about 30 per cent of the monthly rental for housing by way of interest on their mortgage loans.[85]

While there is considerable variation in the situation of individual home purchasers, and therefore of the terms they are able to command when borrowing to buy a house, on the average they pay no less to the bankers than the renter. It is only fair to note that, while all other construction costs have gone up in recent years, the rate of interest has come down.[86] There are many reasons for this, and even economists would not agree as to all of them. Perhaps the two principal ones are the general inflation, or fall in the price of money, and the policy of the government both in its lending and its borrowing activities to exert pressure to lower the interest rate. It is certain that the reduction has not been voluntary on the part of the bankers. They not only oppose any lowering of interest rates, but, in general, any liberalizing of the terms on which mortgage money may be borrowed. A typical attitude was that expressed by one of the speakers at a recent meeting of the New York State League of Savings and Loan Associations: "It seems to me that the veteran's problem is pretty well taken care of by the G. I. Bill of Rights. And I cannot see any necessity for lowering the down payment and postponing the time of maturity and tending to make home owners out of people who should not own

[83] See STRAUS, THE SEVEN MYTHS OF HOUSING (1944), *passim*, for full documentation and analysis of this process.

[84] T. N. E. C., MONOGRAPH 8, p. 150.

[85] *Id.* at 45 and 77.

[86] LASCH, BREAKING THE BUILDING BLOCKADE (1946) 118.

homes."[87] This was at a time when the maximum guarantee under the G. I. Bill was $2,000. One wonders what kind of people "should not" be home owners on the modest scale permitted by such a provision—some new race bred from veterans, perhaps, who may also learn to live without food or clothing and work for twelve hours a day without pay.

In any event, the prevailing interest rate on new loans for home construction remains at about 5 per cent.[88] The cost of making such loans, apart from the allowance for risk, is under 1 per cent; including the allowance for risk, is under 1½ per cent.[89] Probably the majority of loans for houses today are guaranteed by the government, either under the "G. I. bill" or the F. H. A. Nevertheless, under the "G. I. bill" interest is still 4 per cent and under the F. H. A. 4½ per cent, although there is no risk at all for the lender involved in such loans. There would seem to be plenty of margin still for reducing the interest rates on mortgage loans for homes. A reduction in these interest rates of only 1 per cent would save more than 5 per cent of the total cost to the builder or purchaser; a reduction of 2 per cent would save more than 10 per cent of the total cost. Here is another very significant factor in maintaining construction costs at a high level.

One other activity which has an indirect, although probably an important, influence in maintaining building costs is the powerful lobbying done by the real estate and financial interests. The propaganda of this lobby appears almost daily in the metropolitan papers, some of it quite unfettered by either fact or logic. Thus, in a period of a few months, one prominent spokesman for the real estate interests solemnly assured his readers that government red-tape is slowing down the home building program,[90] but that the building industry will end the housing shortage by the end of the year;[91] that government insistence on low priced homes is causing deterioration of quality,[92] but that building costs will be lower by winter no matter what happens to O.P.A.;[93] and that the "Washington planners" have set an excessive goal for house construction,[94] but that home builders are constructing houses at a rate in excess of the government goal.[95] Two of the most frequent appeals are the widow-and-orphan gag, and the socialism-is-coming cry. The first is illustrated by the headlines on a New York Times story: "N. Y. Brokers Form New State Group of Home Owners—Organize Chapter of National Foundation to Protect Small Holders—Public Housing Assailed."[96] The story tells of the formation of an organization of *home owners* at the closing session of a convention of *real estate boards!* The socialization argument reaches a sort of ludicrous extreme when the

[87] Report of Midwinter Conference, N. Y. State League of Savings & Loan Associations, Dec. 13-14, 1945, p. 66.
[88] *Id.* (Report of E. V. Bell, N. Y. State Superintendent of Banks).
[89] LASCH, BREAKING THE BUILDING BLOCKADE (1946) 120.
[90] Winchell A. Royce, Real Estate column, N. Y. World-Telegram, April 23, 1946.
[91] *Id.*, Feb. 8, 1946.
[92] *Id.*, May 16, 1946.
[93] *Id.*, June 11, 1946.
[94] *Id.*, May 10, 1946.
[95] *Id.*, May 13, 1946.
[96] N. Y. Times, June 30, 1946, sec. 8, p. 1.

Wagner-Ellender-Taft bill, sponsored by the eminently conservative Senator Taft, is described as "highly socialistic" by the mortgage bankers of the country.[97]

But ludicrous or not, such lobbying becomes significant when it succeeds by "parliamentary tricks" in killing legislation aimed at improving conditions in the construction industry, as it did at the last session of Congress,[98] and in blocking even a reorganization of existing housing agencies to reduce the red tape which the real estate and financial interests ostensibly deplore.[99] It is impossible to read, much less to judge or weigh, all of the propaganda put out by these groups. However, the Chairman of the New York City Housing Authority has publicly characterized some of it as consisting of "unvarnished lies."[100] Nevertheless, this propaganda has been so effective that Nathan Straus, former U. S. H. A. Administrator, says the present housing shortage has been caused by the real estate interests which have blocked all new housing that might compete with existing slums.[101]

REFORMS—POTENTIAL AND PROBABLE

This is not a pleasant picture. The anatomy of the construction industry reveals handicraft methods, restraints of trade and restrictive practices, inefficiency, greed and graft. The present economic system, whatever its other virtues or faults, has failed miserably in this field.[102] Are there any remedies, and is there any hope? It requires great temerity to venture any suggestions on this subject. As already indicated, I regard the analysis and proposals of Robert Lasch[103] as the most cogent and promising of those yet published. Both Nathan Straus[104] and Thurman Arnold[105] have made important contributions to public knowledge of the subject. Nevertheless, after drawing such a black picture, it seems only appropriate at least to indicate —and no more can be done here—the possible means of improvement. It seems to me that an attack on the prevailing practices and policies in the construction industry can be made on each of three broad fronts. These are: the political; the economic; and the technological.

There are numerous political possibilities, and most of the proposals for solving the housing problem are political in nature. (a) Government control through a system of priorities and a kind of rationing is being tried now, to a degree. It promises no improvement of the fundamental faults already noted. (b) A vigorous and continuous enforcement of the Antitrust Laws, and possible enactment of new laws against other abuses existing in the field, would help some. However, the considerations have been mentioned which indicate that this alone will not solve the problem.

[97] See United Press dispatch, April 22, 1946, reporting Chicago meeting of the Mortgage Bankers Association of America.

[98] Washington Evening Star, July 20, 1946, p. B-1.

[99] N. Y. Times, July 16, 1946, p. 1.

[100] N. Y. Times, March 14, 1946, p. 22.

[101] Straus, *These Men Block Housing* (Jan. 5, 1946) THE NATION 6.

[102] See statement of Charles P. Taft, N. Y. World-Telegram, April 29, 1946, p. 2; statement of Senator Robert A. Taft, N. Y. World-Telegram, June 28, 1946, p. 1.

[103] LASCH, BREAKING THE BUILDING BLOCKADE (1946).

[104] STRAUS, THE SEVEN MYTHS OF HOUSING (1944).

[105] ARNOLD, THE BOTTLENECKS OF BUSINESS (1940).

(c) Public housing, properly administered, enables construction to be undertaken on a larger scale than when privately financed, and therefore achieves some improvement. Public housing, involving some degree of subsidization, will probably always be necessary for a substantial submarginal group which is unable to buy itself adequate housing under our present economic system. (d) But the very crux of the problem is to find some means by which the majority of the population lying in the great middle income groups can buy adequate housing at reasonable prices. Some variation of public housing might help meet this problem. The government might set up a corporation which could use government credit to purchase materials and undertake construction on a wholesale basis, thus eliminating much of the waste now inherent in the process. Such a corporation might also plan residential areas and communities as most private interests are unable to do. Such housing developments could then be sold or leased to those able to pay enough to make a subsidy unnecessary. A few such projects have already been undertaken by very large financial interests, and seem to be successful.[106] (e) The government, either in connection with its housing projects or independently, might and should undertake an extensive program of research in developing new materials and methods. It should also undertake concurrently a program to secure agreement on standardized module units for all common construction materials and supplies. (f) In the field of credit the government has already forced the interest rate down substantially. This pressure should not be relaxed, but increased and continued. Mortgage interest rates can be further lowered, and amortization terms further liberalized with profit to everyone except a few bankers and real estate men. (g) Finally, at the municipal level, building codes can and must be modernized to permit the use of new and improved materials and methods. Land use must be planned and organized so that decent homes when built will be surrounded by decent neighborhoods.

If business desires to avoid government "interference" in this field, there are nonpolitical economic measures that will accomplish many of the objectives of the political proposals. (a) The distributive system for building materials should be simplified. Builders should be able somehow to buy either directly from the manufacturer, or at least on wholesale terms, thus reducing the disproportionate share of the construction dollar which now goes for profits to the distributors of materials. (b) The functions now performed by numerous separate business enterprises should be combined. The process of construction itself, instead of being performed by numerous contractors, should be performed by a single business enterprise with unified management. This should produce greater efficiency and economy. Further, the numerous craft unions which exist in the construction industry, with all their conflicting jurisdictions, are merely reflections of the business organization of the industry. The craft union organization will not be simplified until the business and industrial organization is simplified. (c) The rationalization of the business units engaged in construction should permit some smoothing out of the extreme seasonal

[106] See *Metropolitan Life Makes Housing Pay* (April, 1946) 33 FORTUNE 133.

variations in work, and the payment of an annual wage in some form. This would undoubtedly relieve the pressure for high hourly rates and increase productivity, thus substantially lowering the relative cost of labor. (d) Business itself is capable of extending more liberal terms and lower rates of interest to the ordinary home owner. Large borrowers, often just as great risks as the small ones, are now getting very low interest rates. Except for a very small differential, to allow for cost of administration, similar rates can be made available to the average borrower.

Perhaps the best chance for self-improvement lies in the possibility of technological progress within the industry. (a) Prefabrication so far has succeeded in producing good, but not cheap, houses.[107] It is a dream which has been touted for many years,[108] but which still seems to nurture the potentiality of an industrial revolution for housing.[109] (b) To be distinguished from prefabrication is site-fabrication. This involves some enlargement of the size of the business enterprise undertaking the construction job, and has much in common with the suggested economic rationalization of the industry. Site fabrication has been tried, with some success in achieving economies,[110] and seems to have further possibilities. (c) The standardization of materials and parts by means of generally used module units can easily be undertaken by the industry without government intervention. Business organizations already in existence are equipped to set appropriate standards, and efforts are being made to do so. Theoretically, substantial economies can be secured in this manner. Actually, not enough has been done yet to show any results. (d) Scientific planning and mechanization of the construction process itself is urgently needed, regardless of any other changes. These things have increased the productivity of many other enterprises,[111] including even farming.[112] Experimental applications indicate that there may be as much as a 50 per cent increase in efficiency by such methods.[113] When reasonably presented, unions will accept such changes.[114] The industry cannot afford to neglect this much longer. (e) Scientific research should be undertaken by the construction industry itself, without waiting for government to take the lead. New, cheaper and better materials undoubtedly can and will be discovered. These in turn may lead to better construction methods and greater economies. Both the public and the various segments of the industry can hope for great benefits from an extensive program of research. American industry generally has been successful because of the investment it has made, and the results it has achieved, in scientific research.

The country cannot much longer tolerate a construction industry with archaic handicraft practices and restrictive policies. Not all the members of other industries

[107] See *Where Is Prefabrication? id.* at 127.
[108] See, *e.g., At Last—The "Flivver" House* (Sept., 1941) ESQUIRE 63.
[109] See *Fuller's House* (April, 1946) 33 FORTUNE 167.
[110] See *Big Dave Bohannon, id.* at 145; also The Minneapolis Tribune, Sept. 3, 1946, p. 1.
[111] T. N. E. C., MONOGRAPH 8, p. 189-191.
[112] The Minneapolis Tribune, Sept. 7, 1946, p. 8.
[113] T. N. E. C., MONOGRAPH 8, p. 196.
[114] See N. Y. Herald-Tribune, Jan. 11, 1946, *Labor Saving Tools Accepted by Electricians.*

are either honest, unselfish or philanthropic. It is not economically important that all persons in the construction industry acquire such virtues. The majority of those in most other industries, however, are enlightened enough to know that their own advantage, as well as the public welfare, depends upon achieving a reasonable degree of efficiency by economic rationalization and scientific research. Those engaged in construction must come to realize the same thing. The people must and will have decent houses at prices they can afford to pay. They will get them from the government if private enterprise in construction remains a handicraft industry handcuffed by its own practices.

LEGAL REQUIREMENTS THAT BUILDING CONTRACTORS BE LICENSED*

CORWIN D. EDWARDS†

The various statutes requiring the licensing of building contractors by states and municipalities during the last few years purport to express the public interest.[1] Such laws are said by their advocates to be necessary in order to protect the general public against various abuses. The purpose of this memorandum is to provide a basis for appraisal of this assertion by examining the content of such statutes and the way in which they are actually used.

Ordinarily when abuses within an industry or trade have become so prevalent that they require extensive public control, the persons who point out the evil are those who must deal with the industry as customers or as employees, not the business enterprises within the industry itself. Ordinarily, too, a large majority of the concerns engaged in an industry look with dislike and suspicion upon governmental action designed to limit their freedom to do business as they see fit. Hence the general pattern in extending the use of governmental police power over business is demand by outside groups and resistance by the industry. No type of government regulation is generally thought of by business men as more objectionable than a licensing provision under which the right to enter or continue in an industry becomes subject to governmental approval.

Proposals that contractors be licensed have been conspicuous exceptions to this general rule. The advocates of contractor licensing have been organized groups of persons who would be subject to the proposed licenses. Where such laws have been opposed, the opposition has usually come from outside the group to be controlled.

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[1] In the construction industry laws requiring that contractors be licensed are relatively new but show signs of spreading rapidly. I am not qualified to say how far the issues which they create in the building field may be like those which arise in the licensing of barbers, beauty shops, and similar establishments, where licensing requirements are well established.

This demand to be regulated is not unique, though it is exceptional. There have been other cases in which members of the industry subjected to regulation have been advocates of the scheme. The most conspicuous instance is that of NRA, under which the industrial codes were regarded as desirable by many trade groups, in spite of the fact that through these codes detailed controls over marketing practices were established.

In NRA and similar cases in which trade groups have been hospitable to regulation, the members of the regulated industry have generally believed that the central purpose of the proposed controls was to enhance the industry's prices and profits, and that administration would be left either to key members of the industry or to outsiders who would be sympathetic to the industry's interests and attitudes. It is noteworthy that in the latter days of NRA the business support for code programs of trade practice control was greatly diminished because it had become clear that the government must take over an increasingly large share of responsibility for both policy and administration. With such analogies in mind, the attitude of contractors toward contractor licensing necessarily raises the question whether they too do not find in such a program legislative support for their own trade rather than a protection of the public interest.

I

In particular instances it is clear that trade interests, narrowly conceived, have furnished the incentive for the licensing of contractors. Let us examine the ways in which a licensing system may bolster the position of a particular group of contractors.

1. *Licensing may be used to limit the total number of persons who sell contracting service and thus to reduce the intensity of their competition with one another.* Ordinarily it is not possible to use a licensing system to drive out of the industry people who are already well-established in it. An attempt to do so would bring about disputes which might jeopardize the adoption of the system. However, licenses are readily used to limit the industry to its present size or to reduce the rate of its expansion by discrimination against newcomers. The point was clearly put in the 1938 Convention of the Tile and Mantel Contractors' Association of America in an explanation of the North Carolina Tile Contractors' Licensing Law.[2] "All persons who were engaged in title contracting on the 1st of March, 1937, in the state, who furnished proper proof, received licenses. That was necessary to be done. You can't put anyone out of business already in the business. We can control the future, but we cannot control the past."[3]

Using this principle the North Carolina tile contractors froze the tile contracting industry of the state at the number already engaged in it. "We have in the state

[2] N. C. GEN. STATS. (1943) §87-28 *et seq.* Because of the unusual candor of the discussion at this meeting of the Association, the North Carolina tile law is used throughout this article as a convenient illustration of the forces at work in contractor licensing.

[3] TILE AND MANTEL CONTRACTORS' ASS'N, CONVENTION PROCEEDINGS (meeting held at Atlanta, Ga., Feb. 8-10, 1938) 81. Hereinafter cited as "PROCEEDINGS."

thirty-nine licensed tile contractors and those contractors were engaged in business prior to the time that this Act went into effect in March, 1937. I would say that since that date we have had no additional contractors in the state. . . . Every contractor who was doing business in North Carolina prior to the enactment of the law and at the time of its enactment has secured a license and received that license without examination. We have conducted two examinations, and the applicants for license were not qualified to do business, either by reason of their lack of education or other qualifications to engage in such business."[4]

A restriction of the number of persons in an industry is in effect an indirect restriction of output. It automatically limits the maximum output to that which can be supplied by the operation of these persons at their full capacity and by such expansion of their capacity as they may undertake. In practice the established members of an industry are unlikely to expand their capacity, except when their business is highly profitable, whereas newcomers may appear for various other reasons, such as the desire to achieve business independence, the hope of introducing more economical business methods, and even the effort to earn something by self-employment when paid jobs are not available. Provided they think other established firms will do likewise, the established members of an industry are likely to limit their production to less than their capacity for fear of spoiling the market price, so long as they know that outside competition is not to be feared. Such restrictive understandings are facilitated where the established concerns are bound together in informal acceptance of conventional ways of doing things; for these conventions frequently include common ideas as to how prices should be computed, what are appropriate percentages of profit, and how far part-time operation should be preferred to price-cutting. The force of such common ideas is greatly enhanced by any measures which exclude newcomers who may have different opinions.

2. *Licensing may be used to exclude business enterprises which are unorthodox in their methods of organization or their ways of doing business.* Among building contractors the groups thus excluded are of several different kinds.

a. *General contractors.* Sometimes a general contractor chooses not to subcontract different parts of a building operation but rather to supervise the performance of these parts himself. This departure from the customary system of contracts and subcontracts is bitterly resented by enterprises which specialize in subcontracting. Licensing can be used to prevent such departures. In North Carolina "a number of general contractors, for instance, employed tile setters and mechanics to do their tile work; those people were not qualified to receive license under the law; all of that has been stopped. . . ."[5]

b. *Other groups of subcontractors.* The various operations of building construction have been conventionally subdivided into various fields, each of which lies within the jurisdiction of a particular type of subcontractor. The skill necessary to perform one subcontracting operation is sometimes not greatly different from that

[4] *Id.* at 86.

[5] *Ibid.*

used in another such operation. Moreover, as building techniques develop and substitute building materials appear, contracting groups tend to undertake new types of work to replace operations which are diminishing in importance. They are particularly likely to compete with each other for types of work which do not clearly fall within any one of the older fields.

A subcontracting group which finds its jurisdictional claims disregarded by another may invoke a license law to establish and perpetuate its own ideas of jurisdiction. This too was one of the purposes of the tile contractors' licensing systems in North Carolina. ". . . we had a number of evils. The brick mason who was out of work was soliciting business of every type. He naturally solicited a certain amount of tile business. The plasterer followed suit, as did the linoleum layer . . . the brick mason cannot qualify under this licensing law and has stopped attempting the installation of tile work and gone back to his trade of laying brick; the plasterer has followed suit and the linoleum layer."[6]

Similarly, a Pennsylvania licensing law has been used to protect plumbers against the incursions of other contracting groups. Under this statute only registered master plumbers and registered journeymen in their employ are allowed to make connections with water pipes. An electrical contractor was prosecuted under the statute for connecting an electric heater to water pipes in a residence.[7]

c. *The self-employed journeyman.* Subcontracting operations are often very small. Indeed, a particular job frequently requires no more than a journeyman and a helper. The skill required in laying out the job can be picked up by an intelligent workman. Relatively little capital is required for small operations. Ambitious journeymen constantly attempt to go into business for themselves as contractors. When business is bad and journeymen are unemployed, they are likely to seek contracts rather than remain idle. The self-employed contractor presents a problem to the building trades unions and to contractors who employ union labor, because his hours of work and his compensation for a day's labor may be inferior to the union standard. But even where he observes union conditions, he is a problem to the established contractor because he avoids some of the established concern's costs and because, since he makes his living partly or wholly from work on the job, he does not need to make it exclusively from his contracting profits.

This type of problem is likely to be peculiarly important in the years immediately after the war. It seems probable that many ex-servicemen will take advantage of government assistance to start small businesses for themselves, and that many of them, particularly those with Seabee experience, will be qualified to plan and execute construction jobs. The interests of established construction subcontractors will thus be arrayed against those of a considerable number of men who wish to return to civilian life as self-employed subcontractors.

Licensing laws are used as obstacles to such self-employment. Once more the tilemen's observations on North Carolina tile law furnish an example. "The un-

[6] *Id.* at 83. [7] Commonwealth v. Leswing, 135 Pa. Super. 485, 5 A. (2d) 809 (1939).

employment situation caused the tile setters, a considerable portion of them still apprentice boys, to take a bucket, a few tools, an old automobile, and a few samples they had probably taken out of the backend of some legitimate tile contractor's shop, and set out to solicit tile business . . . it is a legitimate tile contractor who pays the burden of taxation, while the fly-by-night contractor, or the curbstoner, pays little, if any, part of the proper burden of taxation, and only through this law have we been able to bring out in North Carolina all the tile contracting in the state, and make it subject to the same rights and regulations that govern the business in general. . . ."[8]

Various devices are used to deny the self-employed journeyman a license. Sometimes this is accomplished through discriminatory administration of a licensing law. In other cases, however, the wording of the statute is designed to require the withholding of the license from persons who carry on business from their homes because they do not do business upon a substantial scale. The Pennsylvania law about plumbing, for example, provides that: "Every registered master plumber shall have a bona fide place of business . . . and shall display on the front of his or their place of business a sign, 'Registered Plumber,' bearing the name or names of the person, firm, or corporation, in letters not less than three inches high."[9]

d. *Owners of property under construction.* In some cases the person who owns a building which needs alteration or repair, or who is to own a building under construction, does not feel the need for the services of a contractor. The owner may have had experience in the construction industry or may have in his employment an architect, engineer, or other person whose experience he regards as adequate. The work to be done may be simple. Under such circumstances an owner may buy construction materials, employ construction labor, and supply the managerial direction himself. This type of arrangement is sometimes made by a householder in minor work upon his own residence and sometimes by an investment builder who undertakes a certain kind of building operation over and over again. In either case the independent contractor is likely to resent what he regards as invasion of his legitimate market.

Contracting laws are used to break up such practices. In North Carolina, "we have had this situation arise from time to time—an owner would buy tile, order through some jobber or have it shipped directly to him, and he would employ a brick layer or a tile setter, to set that tile, and then, in the enforcement of the Act, we would go to him, he would say: 'I am not engaged in tile contracting at all, this man is working for me, by the hour, or by the day; he is not a contractor, and you can't stop us.' . . . Under the wording of this Act, I am glad to be able to say that we have made it applicable to, and have been fortunate enough to stop jobs of that nature. . . . We have had to issue warrants in several cases, but we have been successful so far in all of our endeavors. . . ."[10]

[8] PROCEEDINGS, *supra* note 3 at 82, 83.
[9] PA. STAT. ANN. (Purdon, Cum. Supp. 1944) tit. 53, §2554.
[10] PROCEEDINGS, *supra* note 3, at 81, 85.

This type of attack was extended to cover the investment builder:

"MR. MARTIN: I suppose you are infected with the investment builder whose procedure is to hire some mechanic to buy the tile through a manufacturer or jobber. The investment builder is building the house in his name, preparing to sell it, naturally, and he goes with the tile mechanic or workman to buy and pay for the tile; he buys the building material that is on the job, and then this man can prove that the only thing that the investment builder has paid him for is the wages; in that instance do you attack both—question the investment builder's right as a tile contractor, or do you also prefer charges against the mechanic who is operating against the system?

"MR. CARTER: We prefer charges in such instances against both parties. . . .

"MR. MARTIN: Do you think it is effective in stopping the practice?

"MR. CARTER: We have stopped it."[11]

3. *Licensing laws are also used by the building contractors of a particular locality to keep the local market for themselves by excluding enterprises from other localities.* In this way the licensing law becomes a legal device to counteract the technological forces which have been gradually destroying the isolated localism of building operations.

The clearest instances of efforts to discriminate between local and non-local contractors have to do with localities within a given state. The discriminations by state law against residents in other states are more indirect, so that they are likely to be matters of inference or of interpretation rather than of obvious fact. Presumably this difference between intra-state and inter-state arrangements is due to the fact that the Federal constitution is a substantial obstacle to discrimination by any state against the citizens of another, whereas the various state constitutions are often less adequate as safeguards of the equal treatment of the citizens of the state.

A striking case of local preference was summarized in a speech which I made in 1940 as economic consultant to the Department of Justice: "Here is a copy of an ordinance passed in 1939 by a Pennsylvania city. It provides that all resident plumbers must pay a fee of $1.00 a fixture for each installation. Every non-resident plumber desiring to work in this city must register with the Board of Health for each and every job to be performed in the city, and must pay a registration fee as follows:

"Plumbing for each apartment of an apartment building, $25.00.

"Plumbing for toilet room in any store room or store building, $25.00.

"Plumbing for a double house, $50.00.

"The fee for a resident in that city was $1.00 per fixture and the fee for non-resident was $1.00 plus $25.00 or more. An organization which sold plumbing equipment in this city happened to be large enough to hire its attorneys by the year, and decided to bring this fee system before a court. Thereupon the discriminatory fees were repealed. When people confronted by such a rule cannot afford legal expenses, ordinances of this sort do not get challenged, but continue to limit competition."[12]

[11] *Id.* at 88.

[12] Corwin D. Edwards, *Restraints in Building Codes,* CENTRAL HOUSING DISCUSSION PAPERS: G: 1940 SERIES, pp. 4-5.

The Pennsylvania state law which governs the licensing of plumbers appears to be designed to handicap the contractor who attempts to do business in a number of different localities, although the technique of discrimination is much less flagrant. This statute appears to discriminate against out-of-state contractors by requiring that every registered master plumber shall have a bona fide place of business in the locality where he is registered. Less obviously, it handicaps non-local plumbers resident within the state; a plumber registered in one locality is required to register in each other locality in which he takes business, although examination is waived for these additional registrations. Moreover, since each such registration is limited to the work which has been contracted for at the time registration takes place, the acceptance of a series of jobs in a city other than the contractor's place of residence requires a series of separate registrations in that city.[13]

The Illinois plumbing license law probably makes it difficult for any contractor to take plumbing jobs in any city in which he is not continuously engaged in business. Section 2F provides that anyone who engages in the plumbing business "with sites or places of business in different cities of this state, shall have at least one licensed Master Plumber, as provided in this Act, continually in charge and supervision in each city where a site or place of plumbing business is so operated."[14] If in the eyes of the law a plumbing contractor has a "place of plumbing business" in any city in which he takes a plumbing job, the meaning of this provision is that a master plumber, that is, an executive of the contracting firm, must be maintained continuously within the city, even though the plumbing jobs undertaken within the city by the contracting organization are intermittent in character. If this interpretation is correct, the natural effect of the statute is to exclude outside firms from competing for jobs.

The Arizona law which requires the licensing of all types of building contractors provides that before obtaining a license the applicant must submit a certificate signed by two reputable citizens of the county in which he resides, stating that he is of good reputation. The licensing authority is also required to determine that the applicant has had experience in the type of work he proposes to contract. These features of the statute interpose a certain natural handicap against out-of-state applicants. If the applicant is a corporation, it must show that it has qualified to do business "by completing all of the acts required for such qualification in this state and in each county in which the contract of any part thereof is to be performed."[15]

There are some indications that the North Carolina tile contractors' licensing law is also used against out-of-state contractors. On the one hand, the attorney who explained the law to the tile contractors' convention pointed out that "it was necessary that the law have uniform application without discrimination as to resident or non-resident contractors."[16] On the other hand, however, he found it necessary to admit to the convention that "the Board has been subjected to some criticism in the

[13] PA. STAT. ANN. (Purdon, Cum. Supp. 1944) tit. 53, §§2554, 2558.
[14] ILL. STAT. ANN. (Jones, 1944) §103.11F.
[15] ARIZ. CODE ANN. (1939) §67-805.
[16] PROCEEDINGS, *supra* note 3, at 80.

past by contractors of other states who have charged the Board with formulating a policy under which was attempted to keep non-resident contractors from doing business in North Carolina." This charge he denied.[17] In subsequent discussion the following exchange took place:

"MR. ALEXANDER: Mr. Carter, as I understand the law, that is an outsider from without the state would have to qualify under your law before he bids on a job?

"MR. CARTER: That is correct, sir; you have to qualify and get your license from the licensing board of the contractors—but if you don't come into the state of North Carolina we would have a difficult time prosecuting you."[18]

4. *Licensing laws sometimes provide convenient devices with which to limit the intensity of competition.* Since such endeavors are in danger of attack under the antitrust laws, they are often not explicitly avowed. Nevertheless, their character may be inferred from avowals like the following by a spokesman for the North Carolina tile contractors:

"This Association, like all of us, was faced with an impossible proposition of recruiting into its ranks all of the contractors in the state, even if it were willing to accept in its membership a large number of persons who held themselves out to the public as being tile contractors, and realizing at the outset that if any rule or set of regulations to be observed were to be adhered to only under a gentleman's agreement, and the only guarantee of the keeping of the rules and regulations being the words of the parties involved, then such a plan was of necessity foredoomed to failure.

"There seemed nothing left to the Association but to attempt to seek some form of control whereby a penalty might be imposed upon those persons who were not willing to adhere to the ethics of good business, and out of that grew the North Carolina Licensing Law."[19]

5. *Licensing laws are used to prevent building materials from being distributed through unorthodox channels of distribution.* In several of the building trades it is traditional for the building contractor to act also as the retailer of building materials and to sell these materials only in conjunction with the service of installing them in a building. This system makes it impossible for the owner of the building to obtain a clear-cut competitive comparison of retail prices for such building materials, or of contractors' charges for installation. An owner who wishes a particular brand of material is automatically prevented from employing as a contractor anyone who is not a dealer in that brand. An owner who wishes a particular contractor to serve him is automatically required to accept one of the brands which that contractor is able and willing to buy. An owner who wishes to install building materials without employing a contractor is prevented from doing so. A manufacturer is automatically excluded from the portion of the building market which is served by contractors who do not handle his brands, and is given an automatic preference in that portion of the market served by contractors who prefer to handle his brands. If manufacturers use exclusive dealers and there are relatively few contractors in a local building market, manufacturers who cannot find contractors as dealers may be excluded from

[17] *Id.* at 82. [18] *Id.* at 86. [19] *Id.* at 80.

that local market entirely so long as their products cannot be sold there except on an installed basis. In so far as such a plan is effective, the maintenance of price controls or other restrictive practices by groups of contractors is greatly facilitated.

In the plumbing industry, proceedings were initiated a few years ago under the antitrust laws[20] in which it was charged that master plumbers associations and the plumbers unions, with the aid of certain manufacturers, endeavored to enforce an orthodox system of distribution of this type. The concerns against which the effort was directed were certain other plumbing manufacturers and certain mail-order houses and other "direct to you" distributors through whom plumbing fixtures could be bought by hotels, factories, and other consuming establishments without the requirement that a contracting service be bought at the same time.[21]

Licensing laws have been used to reenforce this type of restriction upon plumbing. An example, which I described in a public speech in 1940, is as follows:

> "An apparently innocent provision of many codes is that plumbing should be done by licensed plumbers. The interpretation of the term 'plumbing' has been heavily influenced by pressure from master plumbers who desire that it include the advertising and selling of plumbing equipment. According to this rule, if I sell a tub I am a plumber. One such provision I obtained from a copy of a letter sent to a local plumbing company: 'No person other than a registered master plumber as herein provided, shall be allowed to carry on or engage in the business; nor shall any person or persons expose the sign of a plumbing house or building drainage or any advertisement or display pertaining thereto (wholesale show rooms excepted) unless he or they have first secured a license or certificate and been registered in the office of the Board or Bureau of Health of such cities.' "[22]

This provision, which is taken from the Pennsylvania law,[23] was used in at least one Pennsylvania city in an effort to prevent a mail-order house from selling plumbing fixtures. A local building official called upon the manager of one of the retail outlets of the mail-order company to inquire whether, as he alleged was necessary to conform to the law, one of the chief executives of the mail-order company was a licensed plumber. After the mail-order house had shown willingness to test this interpretation of the law in the courts the local official lost interest in the case. This reluctance to invoke a judicial test may have been due to the fact that some years previously the courts had refused to sustain an effort to impose a less drastic restriction. There was an attempt to prevent employees of a company which sold hot water tanks from installing these tanks where the employee who made the installation was not a registered plumber. However, a Pennsylvania court held that this practice is not in violation of the law.[24]

The North Carolina licensing law is used to reenforce the orthodox system of distributing tile through contractors. The first step in the process is to bring pres-

[20] United States v. Central Supply Assoc., *et al.*, indictment in the Northern District of Ohio, March 29, 1940.

[21] The indictment was upheld, against demurrers and motions to quash, even as against the labor unions and their officers. United States v. Central Supply Ass'n, 40 F. Supp. 964 (1941).

[22] Edwards, *supra* note 12, at 4.

[23] PA. STAT. ANN. (Purdon, Cum. Supp. 1944) tit. 53, §2555.

[24] Commonwealth v. Noll, 33 Lack. 103 (1932).

sure to bear upon manufacturers to sell only to licensed contractors, on the theory that otherwise they become accessories to a crime. "The majority of the tile manufacturers have cooperated very nicely with us in that they have refused to sell tile to other than licensed contractors. . . . Any manufacturer has a right to sell tile to anyone who buys it, and he cannot be stopped at all. We only request them, in view of the fact that we have this law, that they cooperate with us to such an extent that they sell to licensed contractors because when they sell to a brick layer or someone who they know is not qualified under the laws of the state to do business, they are in reality not following, I think, the practice of good business, because they are indirectly creating or becoming a party to a crime that will be committed."[25]

The second step is to attempt to prevent contractors in other states from selling tile in North Carolina. "The greatest number of the violations of our law have grown out of the bootlegging of tile . . . tile contractors in other states will ship tile in to general contractors, or in to brick masons, and get the tile that way, and from those the violations of the law grow."[26]

This type of practice is attacked upon the same theory that to sell to unlicensed tile contractors is to act as accessory to a crime. The theory would also be applied, if necessary, to the tile jobber, whose exclusion, though not of practical importance in North Carolina, is the third step in protecting established distributive channels:[27]

"MR. MCCLAMROCH: . . . we have no evil such as you have—we don't have jobbers. (Applause) We don't know of any jobbers that are shipping tile into North Carolina. . . . But if he does ship tile in to somebody who is not licensed he has become an accessory to the crime, the same as the manufacturer as we explained to you.

"MR. PAPPALARDO: I think that is nice."[28]

6. As the previous discussion should have made evident, *licensing laws may be used to play favorites among persons who are or wish to be contractors.* The most obvious and general form of favoritism is the preference for persons already engaged in the business as against newcomers. This preference is inherent in the procedure by which at the time a licensing law is enacted persons already established in the business are presumed to be competent and are given licenses without examination, whereas thereafter all applicants are subjected to examination.

Another type of favoritism may appear, however, in the administration of an established licensing system. The typical licensing law gives to officials chosen from contracting groups wide discretion to determine the character of the examination which precedes the granting of a license and to grade the examination papers of applicants. There is typically no provision in the licensing law or in the procedure established under it to protect the applicant against discrimination. Opportunity is thus afforded for industry-minded inspectors to take into account, as qualifications

[25] PROCEEDINGS, *supra* note 3, at 85. [26] *Ibid.*

[27] In the tile industry the contractors' associations have been concerned about the development of tile jobbers who carry a considerable stock of tile bought from various manufacturers and stand ready to sell this tile to the ultimate consumer and to contractors not engaged primarily in the tile business.

[28] *Id.* at 86.

to engage in the business, such matters as the extent to which the applicant has engaged in or is likely to engage in sharp price competition, whether the applicant is persona grata to the trade union which has jurisdiction in his field, whether the applicant resides outside the state, and whether it is thought desirable by the established contractors to admit additional competitors into their occupation. As has already been pointed out, in the first year of the North Carolina tile contractors' licensing law, two examinations were held but no applicants were licensed.

An illustration of selective favoritism in the conduct of an examination may be drawn from electrical contracting in California. A wealthy person who was building an elaborate private residence there proposed to make electrical installations so complicated that he thought them beyond the ability of the ordinary electrical contractor. He therefore employed an electrical engineer who was a graduate of one of the best Eastern engineering schools to direct the work. Local building officials pointed out that the engineer was not licensed under the local requirement for licensing electrical contractors. Upon the engineer's offer to take an examination, they indicated that no special examination could be given and that the next regular examination would not be held for three months. Completion of the electrical work upon the residence was postponed in order to permit the engineer to take the examination. When the regular time arrived he took it but was reported to have failed. It is asserted that the reason for his failure was his inability to answer the question, How many inches from the floor should the electrical outlet be in a motion picture projection booth?[29]

II

In the light of the foregoing discussion it appears that contractor licensing laws serve purposes akin to those which underlie a wide variety of private restraints of trade by building contractors. The requirement that contractors be licensed adds nothing to the play of motives and interests within the building industry. What it adds is an additional technique through which these motives and interests can be expressed. It is appropriate, therefore, to examine the licensing law as a technical device, in order to ascertain in what respect it enhances the opportunity to restrain trade.

The first of the law's contributions to the technique of restraint is the incorporation of substantive restrictions in the law itself. Reference has already been made to the fact that the licensing law as to tile contractors in North Carolina has been so framed as to exclude from the tile contracting field general contractors and subcontractors engaged primarily in other types of business; to the fact that the Pennsylvania plumbing law excludes persons who do not have a bona fide place of business and imposes a burden of repeated re-registration upon persons who do business outside their own locality; and to the fact that the Illinois plumbing law appears to handicap contractors who operate in several different localities by requiring a licensed master plumber to be continuously in charge in each city.

[29] This example is based upon oral report by persons who asserted that they were personally familiar with the facts.

The second method of using the law for restrictive purposes consists in the establishment of high and discriminatory fees. Reference has already been made to a Pennsylvania city which for a time imposed upon outside contractors fees decidedly higher than those charged local contractors. In Illinois the plumbing law requires applicants for a master plumber's license to pay an application fee of $100 and an annual renewal fee of $25. This is obviously a substantial obstacle to journeymen plumbers who may wish to take plumbing contracts.

The third restrictive element consists in provision for relatively few examinations at infrequent dates. Reference has already been made to the difficulty which infrequent examination created in the case of an elaborate electrical installation in California. Under the North Carolina tile contractors' licensing law, only two examinations were held during the first year of the statute. The Illinois plumbing law provides that examinations shall be held at least four times each year and prohibits persons who fail from taking a re-examination until a full year has elapsed.

The fourth element which facilitates restraints is the opportunity for discrimination and favoritism inherent in an examining process where the examiners are influenced by the point of view of a private interest group. An illustration of discriminatory examination has been offered in the case of electrical contracting in California. The breadth of opportunity for such discrimination is apparent in various other cases. Under the North Carolina tile law, for example, as was announced at the tile contractors' annual convention, all members of the licensing board were members of the Tile and Mantel Contractors' Association of America.[30] This throws light upon the fact that persons who were not regarded as orthodox tile contractors failed to qualify for licenses "either by reason of their lack of education or other qualifications to engage in such business."[31] At the tile contractors' convention the question was asked: "Did you say there were applications from general contractors?" It was answered, "Yes sir, and they were rejected."[32]

The Illinois plumbing law directs the State Department of Registration and Education to set up a board of examiners consisting of a master plumber who has been licensed for at least two years, a journeyman plumber who has been licensed for an equal length of time, and a third person designated by the Department. It also directs that in making the appointments from the trade due consideration shall be given to the recommendations of the Illinois Master Plumbers' Association and the Illinois Association of Journeymen Plumbers and Steam Fitters.[33] The law provides that examination shall be conducted "by the Department with the aid and cooperation of the Board," and that the Department shall grant and deny licenses

[30] PROCEEDINGS, *supra* note 3, at 81. [31] *Id.* at 86.

[32] *Id.* at 87. However, in explaining that the qualifications of a tile contractor are entirely determined by the licensing board, the attorney who expounded the North Carolina law remarked, "Of course, the only purpose of the examination is to inquire into the fitness of the applicant as to his knowledge of tile contracting, and upon that basis alone. There are no politics, there is no unionism, or anything else that enters into the question of license except the personal qualifications of the man who is applying." *Id.* at 87-88.

[33] ILL. STAT. ANN. (Jones, 1944) §103-13.

"upon the recommendation of the Board, respecting each applicant."[34] Thus, the statute itself opens the way for the official views of the contractors' association and the union to become the guides in granting licenses.

The Pennsylvania plumbing law also provides that examiners shall be drawn from the trade, though it does not give a similar recognition to the contractors' organization and the union. Mayors of cities are authorized to appoint boards of examiners consisting of a member of the Board of Health, a plumbing inspector, and two competent plumbers not connected with the city government. Examinations outside the cities are placed in the hands of boards of examiners appointed by the state Secretary of Health and consisting of master plumbers and journeymen plumbers of ten years' experience. The various examining boards are given the power to make "all reasonable rules, regulations, and examinations," subject to approval by city or state health authorities.[35]

Finally, the licensing statutes bring the coercive powers of the state to the support of the various restrictions involved in licensing. Some of the laws are enforced by fines and even by imprisonment. Under the Arizona law, for example, fines may range from $100 to $500 and imprisonment may be as long as six months. Under the Illinois plumbing law fines may range from $25 to $500, and imprisonment in the case of a first offense may be as much as six months and in case of a second offense, as much as a year. Under the Arizona law a construction contract with an unlicensed contractor is legally void.[36] In North Carolina, as has already been pointed out, the penalties of the law may be applicable, not only to the unlicensed contractor, but also to persons who may be interpreted as accessory to his offense in that they have furnished him with tile.

Apart from the provisions of licensing statutes and the discriminatory features of their administration, the mere existence of a substantial number of local and state licensing requirements has the effect of assisting local contractors to exclude outsiders from local markets. Local laws typically do not recognize licenses issued in other localities or licenses issued under state laws. State laws typically give no recognition to local licenses or to licenses in other states. As licensing systems become more prevalent, a contractor who wishes to do business in various localities is likely to find himself required to take a series of examinations and pay a series of fees. The content of these various examinations will be as different as the varying ideas of examiners chosen largely from local members of the trade. At best such a multiplication of requirements must be burdensome. At worst it can become insupportable. The inevitable tendency of the licensing system is to encourage each contractor to confine his operations to the locality in which he resides.

[34] *Id.* at §103.16-A, B.

[35] PA. STAT. ANN. (Purdon, Cum. Supp. 1944) tit. 53, §2533.

[36] Hunt v. Douglas Lumber Co., 41 Ariz. 276, 17 P. (2d) 815 (1933). At least the court so intimated, although the actual decision was that a material man had a mechanics lien on a building built by an unlicensed contractor to whom the material man had furnished materials for its construction in ignorance of the lack of license.

III

The foregoing discussion has dealt with the impact of licensing upon the direct interests of contracting groups which are the advocates and beneficiaries of licensing laws. In addition, licensing has various indirect effects, both upon contracting groups and upon others. Some of the effects are doubtless not intended. Others, though perhaps intended, are not central in the strategy of contractors' associations. Nevertheless, these characteristics of licensing must be briefly described in an evaluation of the licensing system.

Licensing laws may be so drafted that they prevent a manufacturing establishment from maintaining its own buildings with its own work force without the intervention of a contractor. An aspiration to accomplish such a purpose was expressed in the tile contractors' convention during the discussion of the North Carolina law:

"MR. PAGE: Have you in the state any big industrial plants that keep a maintenance gang, who go out and buy tile and set it with their own men?

"MR. CARTER: There would be a serious question of whether or not we could stop that job. Where you have a place and hire a regular man to work on your own premises and nothing else, I would not want to question that.

"MR. PAGE: We in Detroit have a great many of those plants—the Detroit-Edison will buy three or four thousand tile and set it with a maintenance gang. If we were in the state of North Carolina, could we stop that?

"MR. CARTER: I doubt it very seriously."[87]

In states in which the building trades are strongly unionized the licensing law for contractors may be so written as to dovetail with union requirements as to apprenticeship. In such cases the principle of apprenticeship may be extended to the contracting field, so that entry into the contracting trade is open in effect only to union members after a stated period of apprenticeship as journeymen. The Illinois plumbing law is an illustration of this device. It provides for the registration of master plumbers, journeymen plumbers, and apprentices. An applicant for registration as an apprentice must be at least sixteen years old and must submit an affidavit that he is to be immediately employed by a master plumber. An applicant for license as journeyman plumber must produce satisfactory evidence that he has been an apprentice for at least five years, or after a three-years' engineering course has been an apprentice for two years. An applicant for a license as master plumber, that is, as plumbing contractor, must show that he has been a licensed journeyman plumber for at least five years, or that he has graduated from a university engineering course and been employed by a licensed master plumber for at least two years as a licensed journeyman plumber, or that he has been a student in an engineering course for at least three years and has thereafter been employed by a master plumber as a licensed journeyman for at least three years. Licensed master plumbers are authorized to employ journeymen plumbers and apprentices, and licensed journeymen

[87] PROCEEDINGS, *supra* note 3, at 88.

plumbers and apprentices are authorized to engage in the plumbing business only as employees of licensed master plumbers.[38]

Thus the licensing laws for contractors and those for workmen are made to reenforce and support each other. A minimum period as a workman is required before one may become a contractor. If the union controls plumbing labor, plumbing contractors will inevitably have a union background. If a contractors' association controls the contracting group, those entering the trade as workmen will necessarily be persons satisfactory to the association. A close working arrangement between organized labor and organized contractors is almost inevitable under such a law.

The significance of the type of relationship which has just been sketched is far-reaching. Information is not available with which to discuss it adequately here. Briefly, however, it is probable that licensing systems often have the practical effect of strengthening the ability of contractors' associations and trade unions to enforce trade practices incorporated in their own private by-laws but not in the publicly enacted licensing laws.

An illustration will serve to indicate the possibilities, though it describes the relation betwen licensing and private rules in the case of a union rather than a group of contractors. It is drawn from a speech which I made in 1940:

"The (building) code requires that electrical work be done by licensed electricians; and electrical work is so broadly interpreted that the city holds that even the connection of a welding machine cord to an outlet by plugging it in constitutes electrical work and must be done by a licensed electrician. The skill required for this operation is the same as that required to plug in a toaster at the breakfast table.

"Here is what actually happens. A builder who uses electrical welding must employ a licensed electrician to plug the cord in. Licensed electricians in that city are unionized. Under the rules of the union, plugging in a cord is not construction work but maintenance. Further, union rules provide that a maintenance electrician must not do construction work and must remain constantly on the job until its completion. Accordingly, the builder must hire a full-time maintenance electrician to be idle when not plugging in the cord. The welders in that town work an 8-hour day; the electrician, who must be present continuously during the eight hours, works a 6-hour day, with overtime pay thereafter. The consequence is that on one job it cost $1,000 to get that plug plugged in by a licensed electrician."[39]

Obviously this illustration does not exhaust the possible complexities of such a case. If the union had a rule, as some local building unions do, that its members could work only for members of the contractors' association, neither the general contractor nor the welding contractor would be free to hire the union member without the intervention of an electrical contractor. In drawing in the contractors' association the union might also give effect to a contractors' by-law, common among such associations, by which member contractors are required to use bid depositories. Other similar possibilities come readily to mind. The extent to which they actually appear under systems for the licensing of building trades groups cannot be ascertained without extensive research.

[38] ILL. STAT. ANN. (Jones, 1944) §§103.12, 103.15. [39] Edwards, *supra* note 12, at 3.

The effect of licensing laws may also be extended through the interconnection between such laws and local building codes. It is notorious that building codes include, sometimes by design and sometimes by inadvertence, a wide variety of provisions which handicap the introduction of new building materials and require the use of out-moded methods of construction.[40]

Often a builder can bring about the elimination of an absurd feature of a building code only by violating the code and thus procuring a judicial test of its propriety. Since builders are trying to operate for profit rather than as reformers of building codes, such efforts are undertaken far too seldom for the health of the building industry. Where the codes and the licensing laws have been interconnected, the opportunity to challenge a building code in this way may be substantially destroyed, because a builder who does so may jeopardize his whole future in the building industry within the territory over which the licensing authority has jurisdiction.

An illustration is to be found in the Illinois plumbing law. "Wilful violation of any Plumbing Ordinance or by-laws of any city, town, or village or of any law of this state regulating the conduct of plumbing work" is ground upon which the state is required to revoke a master plumber's license. The statute contains provisions for review of revocations of licenses, but since revocation for violation of building codes is mandatory, this review would afford no relief.[41]

Under the Arizona licensing law withdrawal of a license is discretionary with the Registrar of Contractors, rather than mandatory. However, the power to withdraw a license extends not only to wilful and deliberate disregard and violation of the building codes of the Federal government, the state, and any political subdivision of the state, but also to violation of the safety laws and labor laws of the Federal government and of the state. Thus exclusion from the building industry becomes a penalty available against wilful violators of a wide variety of statutes, the content of which has been rapidly expanded in recent years; and a deliberate challenge of the legality of any portion of these statutes is made peculiarly hazardous.

IV

In the foregoing discussion nothing has been said about the point which is often made by the advocates of contractor licensing that a license system is essential to protect the public against bad quality. A connection between licensing and quality tile licensing law described the tile work done by brick mason, plasterer, linoleum is often emphatically asserted. For example, the exponents of the North Carolina layer, general contractor, and self-employed workman, and concluded: "The result

[40] For example, a corporation which manufactures prefabricated houses has found it necessary to fight a continuous guerilla war against local building authorities to prevent the dimension requirements of local building codes from being used to outlaw structural members of its houses, even though with prefabrication methods these structural members will carry loads substantially greater than those which the dimension requirements of building codes are presumably designed to assure.

[41] ILL. STAT. ANN. (Jones, 1944) §103.20.

was inferior material, mostly seconds, bad workmanship and terrible looking jobs, which turned the owners and architects from clay tile to substitutes, such as glass, linoleum, rubber tile, asphalt tile, etc." As a result of licensing they said, "The general contractor has been relieved of many worries, among them the satisfaction of knowing he is going to get good material and competent workmanship. The buying public is also coming more and more to realize that tile work in North Carolina will be done right and when done right is an essential in most of the better constructions. The architect who has been constantly apologizing to the tile business for not specifying tile is now relieved of that duty as he now knows his tile work will be done as he desires it."[42]

There is ground for considerable skepticism about the view that licensing laws are necessary as a guarantee for quality. In the first place, the granting of a license without examination to the entire body of established contractors obviously opens the way to continuance in business by a considerable number of persons whose work is of bad quality. In the second place, there is no obvious reason to believe that installations made by a general contractor or by an architect representing the owner will be skimped in quality in comparison with those made by a sub-contractor. When installations are made by established contractors whose main work lies in other building fields, the incentives to do good work are identical with those which apply to the rest of the business of such contractors and to the business of contractors who specialize in the field which it is proposed to have licensed, that is, desire to maintain their business reputation and enlarge their clientele. It is not obvious that the differences between the various building fields are so sharp as to make it difficult to carry over skill as a contractor from one field into another. The only point at which it is plausible to suppose that licensing excludes a considerable amount of bad quality is where the licensing system is used to drive out the self-employed working man. Taking the quality argument at its full value with respect to this class of contractors, the question still remains how much of a price it may be desirable to pay in risk of inferior quality for the sake of retaining opportunities for a man to go into business for himself.

However, even this formulation of the case overemphasizes the importance of the quality argument. Bad quality in building may be divided into two categories. The first is a matter of appearance or durability not different in kind from bad quality in tailoring a suit of clothes. The second category is a matter of safety or sanitation, in which the interests of the community are involved as well as those of the householder. As to the first category, question arises whether there is any more reason to protect the ultimate consumer by licensing than there is in the many other occupations where quality varies and buyers are sometimes disappointed. In this connection it is noteworthy that the state of North Carolina licenses not only tile contractors but also photographers. If the principle of licensing is adopted in such cases, the eventual scope of the state's control over the right of entry into business is likely to be surprisingly large.

[42] PROCEEDINGS, *supra* note 3, at 83, 84.

As to the second category, provision for the protection of quality has already been made, apart from licensing, in the building regulations of most civilized communities. Requirements that plumbing and electrical installations be inspected are widespread, and they are usually accompanied by a requirement for the over-all inspection of new building structures. If the building inspector's job is adequately defined and adequately done, there is no reason to believe that a licensing law is needed to supplement it. In a jurisdiction where building inspection is slipshod, there is little reason to believe that the indirect and dubious provisions of a licensing law will accomplish the same purpose.

V

Apart from whatever slight effect licensing laws may have upon the quality of construction, they obviously tend to reenforce those characteristics of the building industry which make its performance the least satisfactory of all our great industries. By any ordinary economic test the construction industry stands condemned. In a world in which most costs and prices are declining, construction costs and prices are maintained and driven higher. In a world in which mass production and consumption have become commonplace, the construction industry operates on a basis of petty production and has never succeeded in achieving mass consumption. The industry has so priced itself out of the market that we now take for granted the necessity of Federal subsidy in building residences for between one-fourth and one-half of our population. Construction methods are notoriously antiquated. Handicraft persists where machine methods are known. Small-scale purchase and sale and small-scale, localized operation continue where a larger-scale endeavor would clearly be economical. Restrictive practices and high price policies are more prevalent than in any other industrial field. Seasonal operation is greater than the weather requires. Idle resources are conspicuous even in good times and mass unemployment is a recurrent phenomenon.

A considerable number of factors contribute to the sickness of this industry, and there is no general agreement as to the exact relative importance of each. Nevertheless, it is widely agreed that the following are among the important factors:

1. No single enterprise is responsible for the construction and delivery of a complete building in the same way that one enterprise produces and delivers an automobile, a refrigerator, or a ship. Managerial responsibility and authority are diffused. In consequence every business man in the industry can truthfully say that he has little to gain by reducing his charges, because even a drastic reduction would not appreciably lower the cost of building and, therefore, would not enlarge his market. Equally important, no business man in any segment of the industry has authority broad enough to introduce new, more closely coordinated methods of construction which might greatly reduce costs.

2. The localized character of construction means that prefabrication is difficult, if not impossible, and that handicraft processes are bound to prevail, as they do wherever the market is too narrow for machine processes.

3. The jurisdictional rules and trade practices of various groups in the construction industry, each anxious to protect its own position, have the aggregate effect of freezing the industry's technology, so that not even those changes are made which would be possible in a regime of diffused responsibility and localized markets. To attempt such changes is to become involved in bitter jurisdictional disputes which often cost more than would be saved by the new processes.

The contribution of contractor licensing is to consolidate these three characteristics. As in North Carolina, the licensing system forecloses attempts by general contractors or architects to extend the sphere of centralized direction of building construction. Its tendency to protect each locality against the competition of outsiders helps to maintain the localized production which is already characteristic of the industry. Its support for the jurisdictional rules and trade practices of particular contracting groups helps freeze building methods. Although the freezing is most conspicuous in construction activities, it extends also into a freezing of the channels for distribution of building materials, which diminishes the opportunity to reduce distribution costs. Thus contractor licensing laws are among the influences which tend to keep building costs high, which encourage policies of high prices and limited production, and which facilitate price-fixing. Thereby they help to limit the total market for construction services and construction materials. If this and other similar obstacles could be overcome, we might expect to see a larger volume of construction and also a more generous inclusion of comforts and luxuries in the houses which are now constructed. The immediate effect would be to increase employment in building and to diminish the industry's dependence upon public subsidy. A broader effect would be to enlarge the markets for building materials, particularly such materials as plumbing, electrical installations, tile, and similar commodities upon which the builder tends to skimp. A stimulus so broad as this could not fail to be felt as an influence toward prosperity throughout the entire economy.

THE PROBLEM OF BUILDING CODE IMPROVEMENT

GEORGE N. THOMPSON*

In recent years there has been a mounting chorus of criticism about building codes. They have been blamed for increased construction costs, inability of new materials to gain a footing in the construction field, and numerous other undesirable conditions. Statements about them have sometimes been so unfavorable as to cause concern among thoughtful people that public confidence in measures to assure public safety would be seriously undermined. Of late, a slight reaction is beginning to appear to the effect that, after all, many codes are doing a fair job. Whatever the magnitude of their merits or defects, it becomes apparent to anyone who gives much attention to the matter that here is a subject of much importance to the construction industry as a whole and currently to that considerable part that is giving its best efforts to relieving the shortage in housing.

The background is simple. Experience has proved that government must act in protection of the public to control the operations of the ignorant, the incompetent, and the unscrupulous in the construction field. Fire, collapse, and other sources of injury and even death traceable to imperfect construction occur frequently enough to remind us that trouble can occur even when regulations are in effect to prevent it. What could happen in the absence of such regulations, or in the event of regulations so weakened that they become inadequate, can readily be imagined. So the state steps in, exercises its police power, and attempts to furnish reasonable safeguards.

Workers in the field of building code improvement become accustomed to periodical rediscovery of the subject by others and recurrent demands for sweeping changes which will somehow accomplish a variety of things. They welcome these manifestations of interest for, when no serious disasters are occurring and no economic convulsions are creating demands for drastic measures of all sorts, relatively little interest is displayed in the subject by the general public. It is not always easy, however, when interest is keen to explain the nature of the problems that must be faced and the complicating factors that must be satisfactorily adjusted before a quickening in the rate of progress of improvement is possible. The problems are in part technical,

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in part legal, and in part administrative, with the usual blurring of lines between them that characterizes all governmental undertakings.

Writers on the subject are fond of starting with Hammurabi, who ruled over Babylon more than two thousand years before Christ with the harshness of an Oriental despot. This approach has become so much the vogue that we must dispose of him before we can expect to enter any serious discussion of the subject. It is true that he did promulgate a building code of a sort, the fact being duly recorded on burnt-clay tablets, and that for simplicity and probable effectiveness it has not been surpassed to this day.[1] Speaking generally, the principle of an eye for an eye and a tooth for a tooth prevailed in it. If a builder constructed a house which fell down and killed the occupant, the builder was to be put to death,[1a] and so on. While this system undoubtedly had its good points, we must turn from it regretfully without further comment to those measures which fit more nearly the governmental system under which we find ourselves today.

This system is one in which, by law and tradition, the Federal Government has up to the present occupied a secondary place. Only in areas where it had original jurisdiction, as in the District of Columbia, has it attempted to deal directly with those questions of safety, health, and welfare which concern the occupants of buildings and those who for some reason or other are affected by the multifarious hazards which those inanimate objects are capable of producing. In an advisory way, however, its influence has been considerable.

This situation helps to explain many of the conditions that exist today in the building code field, in particular the lack of uniformity in requirements. Some of the differences that are evident might be expected to proceed naturally from diverse conditions in a great country arising from differences in climate, variations in type and quality of building materials, and other factors that come readily to mind. A great deal, however, arises from the fact that half a dozen states and more than two thousand municipalities have at different times and with different sources of information attempted to set down their individual concepts of what constitute sufficient safeguards in construction. The result could not be otherwise than a medley of requirements involving a considerable range of provisions about the same things, sometimes even resulting in neighboring cities permitting and forbidding the same practices.

As has already been indicated, realization of this fact periodically proves shocking to each new group of investigators whose attention is temporarily riveted on the subject for some reason or other. Comparisons of codes can easily be made which show a considerable range in requirements and even some absurdities. This sort of operation is not very fruitful, however, for it merely calls attention to a situation already known and admitted. The same sort of thing could be done with many other state and local laws on many subjects, the net result being a recitation of

[1] R. F. HARPER, THE CODE OF HAMMURABI (University of Chicago Press, 1934).
[1a] *Id.* at §229.

variations that might or might not be susceptible of reduction depending on many things, including constitutional provisions, judicial decisions, local peculiarities in climate and other respects, and similar factors. Like the existence of Hammurabi's code, the circumstance may be recorded here without argument or further comment, since it is not likely that much could be added to illustrations that have already been given by other writers.

The important question is what can be done constructively to ameliorate the situation within known limits of legal principles, technical knowledge, and administrative competency. This includes an inquiry as to what has already been done and is in process, since it is hardly conceivable that the matter has been wholly neglected over a period of years by intelligent people necessarily aware of the circumstances. It calls also for sympathetic understanding of the fact that many problems which appear at first glance to be relatively simple prove, when analyzed, to resemble the vitamin B complex in that they turn out to be an assortment of items each of which has to be recognized and evaluated.

Let us start with some brief mention of what has taken place over a period of years in the way of work on approach to more uniform requirements. Omitting the developments between Hammurabi and the year 1905—and there were in fact a number of such developments in which the increasing complexity of the problem is recognized—mention may be made of the Recommended Code of the National Board of Fire Underwriters which first appeared in that year and has maintained an existence ever since in successive editions of which the fifth, in 1943, is the latest. Although never represented as something to be taken without adaptation to local conditions, it has nevertheless been widely consulted and exten. ely used, either unchanged or in modified form. Necessarily, it has reflected the viewpoint of those whose chief preoccupation is the ravages of fire, but its recommendations have not been limited to that subject and its influence has been considerable.

In the early 'twenties, the Federal Government began to show an interest in the subject that has continued and become intensified down to the present day. In the report of the Senate Committee on Reconstruction and Production,[2] of 1921, the multiplicity and diversity of building code requirements was treated at some length, with particular emphasis on the economic consequences involved. A significant result was the setting up of the Department of Commerce Building Code Committee, appointed by Secretary of Commerce Hoover in 1921, which maintained an existence to 1934 and was responsible for eight reports[3] which were widely used in

[2] SEN. REP. No. 829, 66th Cong., 3rd Sess. (1921. Report of the Select Committee on Reconstruction and Production).

[3] U. S. DEP'T OF COMM., BUILDING CODE COMM. REPORTS on: Recommended Minimum Requirements for Small Dwelling Construction (1932); Recommended Minimum Requirements for Plumbing (1932); Recommended Minimum Requirements for Masonry Wall Construction (1924, supp. 1931); Minimum Live Loads Allowable for Use in Design of Buildings (1924); Recommended Practice for Arrangement of Building Codes (1925); Recommended Building Code Requirements for Working Stresses in Building Materials (1926); Recommended Minimum Requirements for Fire Resistance in Buildings (1931); and Design and Construction of Building Exits (1935).

that period both in recommended building codes and in local ordinances. The recommendations thus made available had a firm base in a large amount of research carried on by the National Bureau of Standards which also furnished the committee's staff and published its reports. The auspices under which this work was conducted and the quality of its product were responsible for the high degree of public confidence that was shown in it.

Not long after the establishment of this committee, the Pacific Coast Building Officials Conference undertook the preparation of its Uniform Building Code which has appeared at intervals ever since, and has been widely used, and is now available in an edition published in 1946. Other organizations of building officials, notably the New England Building Officials Conference and the Southern Building Codes Congress, have issued recommended codes; and the Building Officials Conference of America is now engaged upon a similar enterprise.

In 1935 work on the preparation of a complete series of building code standards was undertaken under the direction of the Building Code Correlating Committee of the American Standards Association[4] and this has continued to the present, standards having been approved on the subjects of building code administration, masonry, structural steel, reinforced concrete, reinforced gypsum concrete, design loads, and exits, with others in an advanced stage of development. In this undertaking, representative technical committees, drawing their membership from various interested organizations, attempt to arrive at a consensus which will provide generally acceptable standards.

This brief account does not exhaust all the approaches that have been made to the problem of better and more uniform requirements. In fact, occasional mention will be made of other work as this discussion proceeds. It is hoped, however, that it will dispel any impression that serious work on building code improvement has been neglected. The reverse is true. Perhaps the most pertinent observation that might be made with respect to the activity that has gone on and is proceeding at present is that further correlation of independent recommendations would be desirable in the public interest.

It should be stated that this work in the building code field profits greatly from a vast amount of research, testing, and discussion growing out of the work of various professional societies, university laboratories, and other sources of scientific information. What we know about the characteristics of building materials today and are able to utilize in writing regulations concerning their use is derived from the reports of many patient investigators who have built up a stock of information upon which to base decisions. Mention should also be made of the efforts of material manufacturers to provide facts about their products. While it is natural to regard such activities as promotional in type and therefore to be viewed with reservation, it is nevertheless true that this form of intelligent selfishness, if it may be called such, has been responsible for a vast amount of helpful information.

[4] *See* AMER. STANDARDS ASS'N, BUILDING CODE STANDARDIZATION (pamphlet issued by the Association in 1944 and distributed by the American Municipal Association).

In spite of all that has been said about the construction industry as a sprawling group of uncoordinated and wasteful activities which somehow produces structures of doubtful value, there has nevertheless been a great deal of progress in this field. It could hardly be expected that this progress would be otherwise than gradual, considering the great investments in manufacturing plants, the lack of knowledge both about the fundamental characteristics of the materials employed and the forces to be resisted in ordinary use, and the need for keeping within safe limits in order to prevent disasters. Impatience with the faults of the industry is understandable; but sober thought will indicate some justification for the caution with which materials have been employed.

Impatience has been intensified in recent years and the pace of acceptance of new methods has been quickened, again for understandable reasons. We are now building upon the results of a past in which research has contributed a great many facts that we did not know before. Mistakes have been made which can be evaluated and avoided in the future. Techniques of application have been improved up to the point where results can be predicted with much greater assurance than a score of years ago.

For confirmation of these statements it is only necessary to refer to a few of the materials in common use today which were the "new" materials of a previous generation or not much before its time. Take the case of structural steel, an interloper of the 'eighties, thrusting aside cast-iron structural members but accepted with reservations because of occasional uncertain behavior. Made at first by the Bessemer process, its quality and reliability have been steadily improved until today it is regarded as one of our more consistently reliable materials. Reinforced concrete, an intruder at the beginning of the present century, was viewed with suspicion and probably justifiably so at first because much had to be learned about its design, methods of mixing, and other details. Unrelenting research has provided a storehouse of knowledge which has established confidence in this material and accounts for its widespread use.

These earlier struggles of materials now well accepted and fully covered in building regulations are sometimes forgotten when the slow rate of acceptance of new materials today is under discussion. It is often contended that promising new developments are being discriminated against when, in fact, they are merely experiencing the growing pains which older materials have suffered.

Complacent acceptance of the thesis that all new materials must wait respectfully for their turn and be approved only after a long and rigorous apprenticeship is not, however, in accord with the spirit of the present times, nor is it justified in the light of present knowledge. The view is becoming accepted that it should be possible to tell fairly accurately what is expected of a given element in a structure and that it should be possible to investigate new materials in such a way as to determine without long delays whether they are capable of doing what is claimed for them. The long periods of trial and error that have prevailed in the past should thus be cut

down through laboratory tests intended to provide necessary information upon which acceptance or rejection may be based. Correlation of laboratory results with field experience is admittedly not always easy, but much progress is being made along this line.

This development has tended to create a disturbance in the older quiet waters of code writing, with ever-widening ripples as more fundamental facts are assembled and studied. The old methods of calling arbitrarily for so many inches of brickwork or concrete around steel columns as fire protection, thicknesses which may have given approximately equal results in some cases but certainly not in others, has been giving way to a method of statement in which hours of protection afforded are the controlling consideration. It is possible to do this, not because code writers have evolved some mysterious phraseology that outmodes the work of their predecessors, but because a standard method for conducting fire tests[5] has been laboriously evolved by a committee of the American Society for Testing Materials, has been approved by the American Standards Association, and has become the accepted method for determining the fire resistance of structural members and other elements entering into a building. As a result of many tests conducted in various laboratories, the fire resistance of many materials has been definitely determined. Here is an excellent demonstration of the interdependence of the code writer, the professional society, and the scientific laboratory.

There is work yet to be done to make performance rather than specific materials and methods the basis for code requirements. Another committee of the American Society for Testing Materials is probing a field in which standard test methods are as yet lacking. This is a matter of general interest to those engaged in housing, because it is concerned, among other things, with how to determine the strength and other characteristics of structural assemblies which cannot be evaluated through conventional engineering methods. Take, for instance, the matter of prefabricated construction. In many cases this consists of panels pre-assembled into convenient sizes for quick assembly at the site. Much has been written about the reluctance of building officials to accept such construction, and yet it is obvious that no responsible official can approve it in its many manifestations without adequate proof of its safety. The problem then becomes one of accumulating evidence which will demonstrate beyond a reasonable doubt just what the construction is capable of doing. Here the standard test method looms up as a comfortable guide which can answer many questions and place the whole matter on a sound basis. It is for this reason that the early completion of standard test methods having responsible authorship is to be looked forward to as filling a real need.

The problem that confronts local authorities when it becomes apparent that existing code requirements are no longer working satisfactorily is one of great interest. Theirs is the responsibility of providing just enough restrictions on the way in which

[5] AMER. SOC. FOR TESTING MATERIALS, STANDARD METHODS OF FIRE TESTS OF BUILDING CONSTRUCTION AND MATERIALS (ASTM Designation: C19-41).

materials may be used to assure safety for building occupants, but just what constitutes adeqaute safety is none too well defined and many differences of opinion are possible. An extreme solicitude for safety may increase the costs of construction to such an extent that building activity is discouraged. Particular emphasis on some phase of safety, such as fire protection, may bring protests from manufacturers of products that their materials are discriminated against and that a true interpretation of the hazard produced by their products has not been made. The possible unpleasantness arising from such representation, coupled with the labor and expense involved in producing a new code, accounts for much of the reluctance of local authorities to act and consequently for the lag that is only too apparent in efforts to keep codes up to date.

In facing the problem squarely and intelligently, however, there are certain aids available in code writing which help to reduce the apparent difficulties. These include the great array of facts to be found in reports embodying the results of research carried on in recent years. They include also the accumulated experience of local architects, engineers, and others whose knowledge of what is locally available and how it is likely to be put together is invaluable. Probably the most significant development in the field of code requirements, however, is the growing number of reference standards that are available. These are the product of standardizing bodies, professional societies, and other organizations, and embody the composite judgment of representative national committees applied to the facts contained in results of laboratory research and to accumulated practical experience. They do not necessarily supply the one and perfect answer to all questions pertaining to safety in construction; but probably they provide as close an approximation to agreement as can be reached by competent and disinterested authorities. They include standards of quality for building materials and standards of good practice in the design and installation of the materials or combinations of them.

The growing number of these standards has helped to reduce some difficulties in code writing but has raised other questions at the same time. The mechanics of code writing consists not only in chosing the right technical content but in presenting it in a way which is legally enforceable. The standards that have been mentioned are developed by private organizations and must be taken over in some way into law before they can have any effect. The skill with which this is done determines to a very large extent the future effectiveness of the code.

Mention has been made of the standards developed by committees operating under the procedure of the American Standards Association. The work carried on by these committees is of considerable interest because it represents an attempt to bring together the various organizations that are concerned with the problem in order to achieve a common understanding on what is necessary in the way of standards in this field. Under a Building Code Correlating Committee, composed of representatives of organizations having a general interest in all phases of the subject, are some fifteen sectional committees. These deal with such matters as design loads, fire

protection, exits, light and ventilation, and structural materials. Each is under the immediate direction of a sponsor or sponsors consisting of the organizations most definitely identified with the subject and its membership is made up of representatives of other organizations which are in a position to make a contribution. Work is carried on through discussion of drafts of proposed requirements until the desired consensus is reached. Eventual completion of a complete series of such standards should provide the groundwork for generally acceptable basic requirements, so far as it is possible to obtain agreement upon them.

Anyone who has taken the trouble to examine building codes knows that many of them refer to certain standards, often with very sketchy identification and as amended from time to time. The purpose, of course, is to take advantage of the existence of reliable engineering material in its most up-to-date form. In a journal devoted to problems of law, it is hardly necessary to point out that such codes violate sound principles and would hardly meet with favorable treatment if tested in the courts. Nevertheless, the fact that such references are made is indicative of a need that is felt for some way to make use of the best technical recommendations available and in their latest form. It is no solution to state with finality that the method of reference employed is legally indefensible. The need still remains.

So code writers are confronted with a rich storehouse of information organized in readily usable form and kept current by the organizations that have produced it, and yet ways of using it to the best advantage are clouded by questions of certainty and delegation of legislative authority.

In the face of this problem, code writers have reacted differently. The majority have preferred to take the conservative course of citing a standard and identifying it definitely by the year of its adoption by the parent society. Some have avoided references almost altogether and have copied what they thought would be the essential features of the standard into the language of the code. Others have launched out with various experiments, such as requiring good engineering practice, and then citing a given standard as acceptable under the requirement. Still others have experimented with conferring the power to make rules upon the building official or upon a board and indicating that he should be guided by national standards which he can make concrete in his rulings.

What is desired, of course, is some way through which latest authentic standards may be employed as means of control without the necessity of continual recourse to the municipal council to make the use of later editions valid. The efforts may be clumsy and often of doubtful effect; but the intent is plain. One suggestion that offers some promise is a mandatory provision in the administrative provision of the code requiring the building official to bring a revised list of standards before the council at periodic intervals for adoption. Experience has proved that unless some such procedure is followed the references in the code soon become obsolete.

So much attention has been paid to technical matters and so much pressure for accomplishment has been placed upon local authorities once code preparation or

revision has been started that serious work on fundamental theory has been more or less neglected. With the availability of a complete series of reference standards in sight and with a better appreciation of problems arising in the utilization of such standards, it is becoming apparent that time could profitably be spent on ways of making such standards fully effective.

It is possible to conceive of a code consisting, aside from its administrative chapter, of a series of references to designated standards, followed in each case by further provisions giving such additions, modifications, or exceptions as the local authorities might consider advisable. Such a code would be compact, uniform in general treatment with other codes, and presumably would reflect the best possible technical information that could be obtained.

It is quite probable that such a treatment would meet with objections on several grounds, although logically it would have much to commend it. It presupposes acceptance of the principle that adoption by reference is a desirable procedure and this will be resisted for a number of reasons, both legal and practical. Among the latter will be the contention that to find out what is really required the reader must resort to a perusal of numerous standards rather than get his information at first hand in the code. This is an objection that will appeal to many; and yet it is a fact that many codes already represent a partial adoption of the principle, with no perceptible difficulty.

To meet such objections, a method of statement has been proposed in which those features in the standard that are relatively important from the standpoint of safety, and hence presumably might well be passed on directly by the municipal authorities, are given in the code in addition to the reference to the complete standard. The result is the repetition of considerable matter already to be found in the standard, with some gain in convenience but with the necessity still remaining to consult the standard itself in order to observe all details.

From what has been said, it is apparent that serious work on the development of technical standards is actually in process. It should not be inferred from this, however, that the rate of progress in making such standards available for use is always as good as might be desired nor that the mere existence of such standards constitutes all that is necessary to make building codes satisfactory. Committee work on developing recommended requirements often brings out points of controversy where well-qualified persons find themselves unable to reach an immediate agreement. The tedious process of adjustment of views must be gone through with, and meanwhile a yawning gap in the structure of reasonably uniform requirements remains unfilled. It cannot be said, however, that so far as the technical side of the problem is concerned, there is any lack of machinery for resolving of difficulties. The chief criticism to be advanced here is that efforts might well be accelerated in the public interest.

The question has been raised more than once whether the present pattern of more than two thousand separate local codes could not be replaced by some more

logical system in which a single set of technical requirements based on national standards would be varied only to the extent necessary to meet special local conditions. Such an arrangement undoubtedly would have many advantages for the growing number of concerns which sell building materials over a wide area or, as is becoming more prevalent, market complete houses of the prefabricated type. It would also no doubt be welcomed by the many designers and builders who do a country-wide business. It seems hardly likely that acceptance of such an arrangement is to be expected in the near future, for varying state laws, local traditions, and genuine differences in local needs offer too great a handicap. However, each revision of a local code tends to bring it into greater uniformity with others because of the common use of basic material. A comparison of a group of local codes ten or fifteen years ago with their successors today demonstrates clearly that the approach to reasonable uniformity, if slow, is nevertheless in process. It has been accelerated through the use of proposed uniform codes developed by organizations of building officials as well as by the availability of the national standards to which frequent reference has been made.

While there are obvious difficulties in achieving greater uniformity on a country-wide basis, the chances of making progress in this direction within a given state would seem to be much better. A state-wide code, with due allowances for necessary local differences mostly of an administrative nature, has much to commend it. Yet, with few exceptions, the states have preferred to delegate the matter to the municipalities through enabling acts or charter provisions. At times they have adopted miscellaneous legislation applying to such things as exits for places of public assembly and industrial establishments; but in the main the municipalities have carried the major responsibility. In Ohio, Indiana, Wisconsin, and a few other states, actual state codes exist. That in Wisconsin has a long record of successful administration, its terms like those of most state codes do not apply to one- and two-family houses. It presents, however, an interesting application of the principle of entrusting the preparation of detailed requirements to a state commission which may modify them as time goes on without recourse to the legislature. This delegation of authority has apparently worked well and has provided an effective means of making necessary technical adjustments with the passage of time.

Picard,[6] in discussing this use of delegated legislative power, points out that it has become well established as a means of dealing with technical details in accordance with policies and standards laid down by the law-making body. There is much to be said for its more extensive application in the form of state building codes prepared by boards having technical competence and administrative ability. Greater uniformity in requirements over a considerable area, responsiveness to new developments in the construction art, and centralized testing and acceptance of materials are all possible under such an arrangement. Studies being conducted in a number of states by official bodies indicate that these advantages are becoming appreciated and

[6] PICARD, ESSENTIALS IN SAFETY CODE MAKING (1938).

that additions to the relatively small number of state codes now in existence may be expected. However, it is to be expected that any trend of this kind will be gradual and that the municipal type of code will be the prevailing one for an indefinite period.

The wisdom and resourcefulness with which building officials apply the terms of the code are highly important and yet most discussions of building codes have little to say on this point. Control of building operations starts with the application for a permit, extends through the granting of this permit on approval of plans, involves inspection of work under way, and includes issuance of a certificate of occupancy for most structures, although this is not usually the case where housing is concerned. At many points along the way the building official must make decisions. If the plans show construction not conforming to the code, the application for permit may be rejected. If, during the course of construction, work is found to be at variance with some code requirement, a stop order may be issued. Evidence of willful violations may be turned over to the municipal legal department for prosecution, which may result in a fine for the violation; the issuance of a certificate of occupancy may be held up when final inspection discloses unsafe conditions.

It will readily be seen that there can be many occasions where difficult decisions must be made. Buildings do not fall into stereotyped patterns and code requirements can never be all-inclusive. As a result, interpretations of the code applying to particular cases must be made and slight deviations must be weighed to determine whether the spirit of the requirements is being observed. In many cases the literal terms of the code make no allowance for such actions, but it is generally conceded that they take place as a matter of practical administration. If this is the case, it would seem better to provide for some exercise of discretionary power in the code rather than to have its requirements relaxed without definite limitation. It is, of course, evident that the official cannot make law and that any rulings he may issue must be such as to remain clearly within its intent.

It is only fair to say that the granting of considerable discretion to the building official in the exercise of his duties is not always looked upon with favor. Burton[7] has questioned the practice and he has been joined by others who see in it the possibility of favoritism. Miller,[8] however, has consistently advocated the exercise of discretionary power, contending that its use is inevitable whether officially recognized or not and that inability to exercise it reduces the official to the status of a mere clerk, incapable of dealing intelligently with situations as they arise.

Whatever the degree of discretion exercised, there will always be situations where differences of opinion arise between the official and those who desire to undertake building operations. Infallibility in the interpretation of code requirements is not possible. Wisely, many municipalities have made provisions for boards of appeal before which grievances may be aired and by which capricious and arbitrary actions

[7] F. Burton, *Some Legal Aspects of Building Codes and Their Enforcement* (1924) PROCEEDINGS, 10TH ANNUAL MEETING OF BUILDING OFFICIALS CONFERENCE OF AMERICA 94.

[8] R. P. Miller, *Economic Housing as Affected by Building Codes* (Appendix to Report of the Committee on Construction, President's Conference on Home Building and Home Ownership, 1931).

of an official may be corrected. In some cases, these boards pass upon proposals for use of new materials and methods of construction. In others, they hear appeals from the building official's rulings on these matters. When authorized by state law, they grant variations from the strict terms of the code in cases of hardship or manifest injustice due to special conditions.

The desirability of having such boards of appeal has been recognized in a number of recommendations, including the standard for administrative requirements developed under the procedure of the American Standards Association.[9] Here a five-man board is recommended to which is assigned the duty of hearing appeals and rendering prompt decisions on the question at issue. A person aggrieved by the decision of the board may apply to the appropriate court to correct errors of law in the board's decisions.

The recent report of the Chicago Association of Commerce (prepared by the John B. Pierce Foundation), on the building code situation in Chicago,[10] lays emphasis on the need for a definite appeals procedure and proposes the unusual arrangement of two boards, one to hear appeals and the other to pass upon the merits of new materials and new methods of construction, formulate rules, and propose amendments to the code. Such an arrangement seems hardly necessary. New York City has had a Board of Standards and Appeals for many years, which, although subject to various vicissitudes,[11] has, on the whole, apparently performed acceptably with respect to both functions. Picard[10a] points out that the experience gained by a board in studying appeals makes it peculiarly suited to developing suggestions for changes in the code, since it has first-hand knowledge of troubles that develop.

Although some difficulty may be experienced in smaller communities in finding qualified men to make up boards of appeal, the importance of this link in the system of building regulation is so great as to warrant unusual efforts in getting the necessary persons to serve. It provides a relatively inexpensive and prompt method of correcting errors in judgment on the part of the building official. Any accumulation of cases brought before it serves as a danger signal that certain parts of the code may need amendment. Its efficient functioning can do much to create public confidence in the manner in which the community provides for safety of building occupants.

With respect to the possibilities for further refinements in building code requirements applying to dwellings, there is much to be done, even though much has already been done to remove excessive and inconsistent provisions. As a matter of fact, the loads and forces to which such structures are subjected are not any too well known even after many years of living in them. We have come a long way in this country from the huge hand-hewn timbers of the colonial era to the relatively fragile

[9] AMER. STANDARDS ASS'N, ADMINISTRATIVE REQUIREMENTS FOR BUILDING CODES (A55.1-1944). (A revised edition of this standard is in preparation.)

[10] BUILDING REGULATION IN CHICAGO, AN ANALYSIS AND RECOMMENDATIONS (presented by the Chicago Association of Commerce, Nov., 1945).

[11] JOHN C. COMER, NEW YORK CITY BUILDING CONTROL, 1800-1941 (1942).

[10a] *Op. cit. supra* note 6.

two-by-four studs and two-by-eight or ten-inch joists of the present era in wood construction; and yet it is not certain that this paring down process has reached its ultimate limit. We need to know more about snow loads, how wind acts upon walls and roofs, and how loads are distributed, to make requirements for various structural members in a house.

Similarly, the characteristics of building materials have not been fully explored, despite the intensive research that has been devoted to them, and new ways of using them are being devised. Improved processes of manufacture make it possible to place greater dependence upon many materials than before. Applications of new materials and combinations of them with conventional types are introducing new ways of building houses. As a result, adjustments in building code requirements must be made periodically.

As evidence of progress may be cited the increased attention that is being paid to the way in which wind acts upon the walls and roofs of buildings. The great majority of codes have dealt with this matter very sketchily; and the fact that relatively little trouble has been experienced has probably been due to liberal assumptions as to wind loads and liberal amounts of materials used in construction. As the size of structural members is reduced for reasons of economy, however, a great deal more thought has to be given to possible effects of wind. It is fortunate that these effects are becoming better understood so that provision can be made for them. Most code requirements have been based upon the assumption that wind pressures, on both walls and roofs are always inward; whereas it is now known that outward pressures are entirely possible, a fact that helps to explain the occasional departures of roofs in strong windstorms. So-called negative pressures on the leeward side of a building must also be taken into account.

Considerable discussion also develops around the conventional requirement of forty pounds per square foot as the assumed load on dwelling floors as a result of the weight of furniture and occupants. Values as high as one hundred pounds have appeared in codes in the past but the figure of forty pounds is now very general. It can be shown that in many houses the load involved does not run much above ten pounds per square foot. Admittedly, however, there may be occasional increases in load due to such events as cocktail parties and some examples of concentrated loads will come to mind. Still, the difference between ten and forty pounds is so great as to cause occasional recommendations that thirty pounds is ample as an assumption, especially if the possibility of a concentrated load at any point on the floor is provided for. Such recommendations indicate that the final answer may not yet have been reached in what might appear at first glance to be a very simple problem. It is noticeable in all such cases, however, that suggested changes become smaller and smaller as time goes on.

Associated with closer approximations of loads are increases in working stresses for building materials. Both tend to reduce whatever margin of safety may have been present in earlier requirements. Within the last twenty years, allowable stresses

for structural steel have increased from sixteen to twenty thousand pounds per square inch, with at least one city permitting twenty-four thousand. Similarly, recommendations sponsored by lumber manufacturers represent an increase of twenty percent in allowable stress over that permitted in most codes, provided material that is carefully graded for stress value is used. Allowable stresses in reinforced concrete, predicated on the use of accurate mixes and controlled water content, have also shown a tendency to increase with the passage of years These are only examples of a more or less general tendency toward more economical use of materials when specified conditions of quality are observed. It is apparent that they represent a trend which necessarily has a limit in each case, although how close this limit may be approached is still uncertain.

Developments in prefabricated construction have brought about more attention to application of principles of structural design of houses. Where economy in use of materials and lightness of product in order to hold down freight charges are important factors, real engineering design is necessary. The resulting products, although in most cases amply strong for the purpose intended, have appeared flimsy to many observers. Not being provided for specifically in many codes, the burden of proof has rested on their sponsors that they comply with safety requirements.

There is a general impression that such products are shut out of consideration by most codes. Actually, a large number of codes deal with the matter of acceptance of new materials and new methods of construction in their administrative chapters by conferring upon the building official or on a board the power to approve upon submittal of sufficient evidence that the innovation is safe.

Since these provisions are general in character and leave a great deal to the discretion of the local authorities, the chances of varying, and even prejudiced, treatment are always present. Obviously, the new material or construction has no special claim to attention just because it is new. Neither should it suffer from a handicap on that account. The problem is to provide a machinery that will assure it prompt and impartial consideration on its merits. This involves four steps—a suitably worded provision in the code, standard methods of testing to assure uniform treatment, uniform methods of evaluating the results of tests, and a competent board to act as occasion requires.

A good deal has been said in discussions of building codes about the existence of provisions that have been inserted for selfish motives by groups which might be expected to benefit from them. Undoubtedly such requirements exist, although it is not always possible to say with assurance just how much self-interest and how much honest difference of opinion are responsible. The correction of conditions of this nature is a local problem and the pressure of enlightened public opinion is necessary to accomplish desirable changes. The existence of national standards such as have been described should prove to be of material assistance, however, since a basis for comparison is at once established and the objectionable local requirement can be placed upon the defensive.

Any constructive approach to the building code problem today must recognize the factors that have been described. There must be available sound reference standards which take into account the great amount of information that has accumulated and is still accumulating as the result of research. The evolution of these standards, if they are to be universally acceptable, requires arrangements for obtaining composite judgment and adjustment of views on the part of persons whose knowledge and experience are such as to command respect. With the content thus established on the basis of scientific fact and collective judgment, the problem then presents itself of how to make new technical contributions immediately effective either through the terms of the code itself or by authorized administrative action. Finally, there is the ever-present problem of assuring competenee and impartiality in enforcement by building departments that are generally understaffed and inadequately financed.

The situation is far from hopeless, however. Standards are being produced, if perhaps too slowly, that are finding their way into use and are supplying the needed basis for comparison with existing requirements of doubtful value. The amount of hard, gruelling work that is put into this feature of the problem is little known or appreciated. The extent to which code provisions tend to fall behind progress because of the necessity of adhering to legal requirements is being studied and promising ways of overcoming this difficulty are being advanced. Probably there has never been a time when more intensive work was being devoted to development of recommended requirements by organizations of building officials. The various committees acting under the procedure of the American Standards Association are being urged to accelerate their work in order that standards produced through this cooperative work may be available. The National Bureau of Standards, which for a quarter of a century has been looked to as a central source of unbiased information in this field, is continuing its work of evaluating research and the drafting of recommendations. The Construction Division of the Department of Commerce has interested itself in the promotion of good requirements, realizing the beneficial economic effects to be expected.[12] The National Housing Agency is paying special attention to improved provisions bearing upon residential structures.[13] All these activities point to a thorough sifting of existing requirements and the substitution of more rational ones, where this is necessary.

This very intensity of interest and multiplicity of effort will make it necessary to do some very careful coordination. Slight differences in treatment suggested by various organizations will somehow have to be adjusted if the full advantages of a reasonable degree of uniformity are to be realized. Real statesmanship and strong leadership may be necessary to persuade all interested organizations to give up any pride of authorship or sense of prior interest in the field in order that the public

[12] Mayes, *Building Code Improvement* (July, 1946) 34 DOMESTIC COMMERCE 52.

[13] The National Housing Agency is understood to be preparing a revision of a report "Recommended Building Code Requirements for New Dwelling Construction," issued sometime ago under the auspices of the Central Housing Committee.

may be better served. We have come so far, however, in dealing with the problems involved, that any further necessary adjustments to produce results of greatest usefulness may be confidently expected to follow as a matter of common sense and public responsibility.

In summary, it may be said that the defects of building codes are well understood, that constructive efforts are under way to correct them, and that, with proper understanding and encouragement, efforts in this direction may be expected to greatly improve the structure of public safety regulations in this country. Perhaps the greatest benefit to be anticipated will be general acceptance of the need for continuous adjustment of such regulations in accordance with sound principles, replacing sporadic drives to tighten up requirements in response to some disaster and subsequently to relax them for reasons of economy. Continuous attention to improvement in requirements is the way in which real progress should be made in so serious a matter as public safety.

ADMINISTRATIVE-LEGAL METHODOLOGIES IN ELIMINATION OF SUB-STANDARD HOUSING

SPENCER PARRATT*

PERSPECTIVE

The elimination of sub-standard housing has two polar aspects. The administrative problems involved in the achievement of each polar aspect differs somewhat from the other. The first problem involves the elimination of individual places used for habitation purposes. Each dwelling is here a unit and must be approached in terms of a criterion and method designed to elevate the particular inadequacies of the unit. The second problem involves the contiguous, or nearly contiguous, area in which a number of housing units exist, but which are treated as existing together. Emphasis is placed upon the area rather than upon the particular unit; a presumption being made that a composite of inadequacies support administrative action directed against the total problem. While the criterion, or criteria, involved must be closely related to the attack upon the individual unit, the evidentiary justification for action must relate to broader environmental factors than would seem necessary in action against a single housing unit.

Attention, up to the present, has been directed most successfully against preventing future construction from immediately reaching the sub-standard class. It is in the struggling attempts to determine the positive standards against which building and zoning conditions are fixed that attention must be turned to find criteria for elimination of existing places to some extent. But the prospective use of regulation is basically different, in its psychological atmosphere, from the use of retrospective authority. A standard supporting future limitation, in addition, might be expected to provide a lesser margin above minimum standard values than would seem necessary to justify intervention to destroy existing use values in property. But the presence of this differential need not curtail the development of a second body of data to support elimination of a use for present and future purposes that conflicts with an accepted scientific criterion or criteria. As a matter of historical development, the problem is not the determination of the possibility of a double standard, one prospective and the other immediately operative against present and future use, but the determination of a method by which the criterion, or criteria, supporting curtailment of present and future use, can be made to operate with greater utilization of contemporary and evolving scientific knowledge of the relation of housing to health and culture.

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Traditionally there has been an established legal principle limiting private use of property when it conflicts with public use and the concept had been projected against housing and living places primarily as a development in nuisance doctrines. Nuisances, by definition, are uses of property so contrary to public interest as to support abatement. But nuisances have, traditionally, been essentially judicially defined. Thus the criteria have been conformable to maintenance of a relatively consistent pattern of protecting private property interests. Lawyers and judges are experts in patterns of property interests; not necessarily in health, welfare, cultural well-being and engineering safety. The basic problem becomes, to a considerable extent, the development of an administrative mechanism to facilitate the reevaluation of the property interest pattern of values against the newer expertnesses against which housing must be measured if our communal use of scientific discovery and invention are to be reflected in our living conditions.

THE NUISANCE DOCTRINE

It is practically impossible to separate the standard against which governmental action is projected to take place and the methods by which this is to be done. The nature of the elimination of sub-standard housing, however, permits of certain observations if maximum success is to be achieved. Historically certain factors can be observed that have significance. Perhaps it is of noteworthy importance that the first housing laws were developed as applications of health authority.[1] These were in New York. It should be emphasized that this start at regulation was made (in 1801) prior to the germ theory of disease; as a consequence the claim to expertness in the health authorities as being based upon a body of cause and effect data beyond the understanding of any but a trained person could not be sustained with competence. It would only meet necessary limitations of the times when the three commissioners were given power to enter buildings to inspect to determine if situations existed wherein the "public health or that of individuals shall be endangered thereby." After examination the commissioners, or a majority of them, could declare the premises to be a nuisance and notify the owner and declare a time within which abatement must take place. Failure of the owner to comply left a duty on the sheriff, acting upon order of the mayor or recorder, to abate or remove the nuisance. The owner became liable for payment of up to $100, out of which costs of abatement or removal, were to be deducted.

In its time the grant of power to the Health Commissioners in New York City was extraordinary. "No such extensive grant of power had been previously made to any officers of the city."[2] Although the doctrine of combining expertness and protection of legitimate property interests had not emerged at this early date, the statute was forward looking; perhaps too much so, because the absence of procedural

[1] N. Y. Laws 1801, c. 92. See FORD, SLUMS AND HOUSING (1936) *passim*. For a summary of the evolution of the situation in New York City, see MCGOLDRICK, GRANBARD & HOROWITZ, BUILDING REGULATIONS IN NEW YORK CITY (1944) ch. II.

[2] MCGOLDRICK *et al., op. cit. supra* note 1, at 58.

conditions to extensive powers tended to cause the courts to strictly construe the substantive authority, in keeping with the notion that the courts were quite capable of examining into the presence of nuisance conditions. The Act of 1801 did not delegate power to the officials of the local government. The Commissioners of Health were state officers having territorial jurisdiction within the City of New York. Apparently the absence of faith in local administration was somewhat overcome by centralizing power directly under the Governor and within scrutiny of the legislature. But there was no method provided for making rules and regulations, although the power to create standards defining "illegal nuisance" and lawful use of property was delegated. There was no method provided by which the factual observations of the inspectional processes could be clearly reduced to record evidence. Nor were the findings of the commissioners accorded presumptive conclusiveness as to the presence of illegality in cases of enforcement difficulties. The use of a hearing of interested parties was nowhere mentioned. The statute was silent as to judicial review—a silence that opened the door to judicial definition in the absence of legislative prescription.[3]

The Act of 1801, with its emphasis upon nuisances as criteria for regulation relating to housing standards, would be only of historical interest but for the fact that the pattern became deeply implanted in our administrative-legal system. In 1866 the New York Legislature provided for the creation of the Metropolitan Sanitation District with continuing state control and absorption of the previous functions of the Health Commissioners.[4] The new agency was to be presided over by a Metropolitan Board of Health and this authority was to be made of four sanitation commissioners and the metropolitan police commissioners acting ex-officio. "The principal changes in the law from the Act of 1801 were the wider jurisdiction vested in the board and the specified procedure for hearings. The act represented the first major attempt by the government to correct housing evils by regulating conditions within buildings. It permitted the Board of Health to define and to rectify any dangers to health it found in a building or elsewhere."[5]

The hearing process under the Act of 1866 was not well developed by contemporary standards, if the purpose was to obtain a maximum of finality for the administrator in cases of court review. The Board determined by filing in its records the facts and proof sufficient to cause it to declare something a nuisance, defined vaguely in the state as "a condition dangerous to life or health." An order was issued upon the owner, occupant or tenant that the nuisance be removed or otherwise abated. Except where there was imminent danger from pestilence (a determination that must have been technically difficult to support before germs were known) an opportunity to seek a hearing was granted. At the hearing the person adversely affected could have his factual position recorded and entered in the minutes. The right of the person to know the Board's evidence and to confront the inspector or whoever

[3] Rogers v. Barker, 31 Barb. 447 (N. Y. Sup. Ct. 1860).
[4] N. Y. Laws 1866, c. 74.
[5] McGOLDRICK *et al.*, *op. cit. supra* note 1, at 59.

supplied the data supporting the order is uncertain. The hearing seems to have been intended to permit the introduction of whatever evidence that the parties adversely affected thought material and the Board would receive under its rules. After the hearing the Board could reaffirm, rescind or modify its order. Again it will be noted that hearing comes after the order has been issued; not in the process of determining whether or not an order should issue.

The judicial history of the Act of 1866 is one of the classic sequences of decisions upon which the basic doctrines in American administrative law have been developed. In *Reynolds v. Schultz*[6] a number of issues were raised that have been so firmly settled since that there is no use in noting them. But the court was feeling its way into unknown ramifications of the law, and a feeling was left that there would have been greater certainty attached to the administrative processes if the hearing had preceded the order, although the method used was not declared to be fatal. The party adversely affected is in the court's opinion entitled to confront the witnesses against him. The evidence upon which the Board had acted was partly obtained through Board member inspection and apparently the inspection had resulted in a finding of fact in the form of a conclusion, rather than a statement of factual itemization. This created difficulty and the court decided that any injustice might be corrected on certiorari through judicial reconsideration, but there was no determination how far the Board could make rules, nor how far it must follow its rules once made. The issues are such that they confront contemporary administration and cannot be ignored in determining a mechanism for elimination of sub-standard housing, particularly as related to individual places. Although the court did sustain the action of the Board, it did not sustain a doctrine that gave the Board an independence from judicial review to see whether or not the factual conditions of nuisance met the court's definition of a legal nuisance. The unfortunate wording of early legislation made this type of association inevitable as a condition to establishing a reviewable jurisdiction by the Board.

Under the Act of 1866 the question of proof of conditions warranting the extraordinary curtailment of property use was raised and basic patterns developed that cast a shadow down to the present time. Thus the Court of Appeals of New York was confronted with the sufficiency of evidence to support an order declaring a situation dangerous to health and a public nuisance. The Board of Health filed, among its records, "statements of competent persons under oath, that said business endangered the health of the people of the vicinity, was offensive to their senses, and rendered their life uncomfortable, and of facts sustaining such statements." Upon this evidence the Board based its order. The defendant was granted a right to be heard following notice of the order and he could not complain of the Board's action if he did not avail himself of the opportunity to be heard.[7]

The basic pattern of seeking elimination of undesirable property uses based upon

[6] 27 N. Y. Sup. Ct. 282, 34 How. Pr. 147 (1866).
[7] Metropolitan Board of Health v. Heister, 37 N. Y. 661 (1868).

police power to protect public health had become well established when the Court of Appeals was confronted with the *Copcutt* case in 1893.[8] This case involved construction of a public health law applicable to all cities in New York State, except New York, Brooklyn and Buffalo. Under this Act[9] Health Boards were to receive and examine "into the nature of complaints made by any of the inhabitants concerning nuisances or causes or danger or injury to life and health within the limits of the jurisdiction; to enter upon or within any place or premises where nuisances or conditions dangerous to life and health are known or believed to exist, and by appointed members or persons to inspect and examine the same . . . and said board of health shall furnish said owners, agents and occupants a written statement of results or conclusions of said examinations; and every board of health shall have power, and it shall be its duty, to order the suppression and removal of nuisances and conditions detrimental to life and health found to exist within the limits of its jurisdiction." It is granted power to make orders and regulations in special and individual cases, not of general application, as it may see fit, "concerning the suppression and removal of nuisances." Violation of orders and regulations is made a misdemeanor, but the Board may commence actions to restrain and abate nuisances, and to enforce its orders and regulations.

The issue had become: Can the Board of Health declare a use of property a nuisance? "If the decisions of these boards were final and conclusive, even after a hearing, the citizen would in many cases hold his property subject to the judgments of men holding ephemeral positions in municipal bodies and boards of health, frequently uneducated, and generally unfitted to discharge grave judicial functions. Boards of health, under the acts referred to, cannot, as to any existing state of facts, by their determination make a nuisance which is not in fact a nuisance."[10]

It is within the principle of the *Copcutt* case that the celebrated *Trinity Church* tenement house case was decided.[11] It would seem that no matter what the procedure used, the health officer cannot act under the guise of nuisance in circumstances in which the courts will not in fact find a nuisance on review. In other words, the limiting of elimination of sub-standard housing to concepts in the law related to nuisance denies any standard of expertness that is not subject to possible construction against the nuisance concepts of the courts. It is possible that through a slow process of redefinition of nuisances through the accumulation of judicial decisions a new standard can be developed; but this method seems somewhat futile if utilization of modern standards of health and housing expertness is to be made available to the communal interest. No more significant observation can be made than that the basic pattern of regulation of land use, in which the elimination of sub-standard housing is a segment, was largely developed before the germ theory of

[8] People *ex rel.* Copcutt v. Board of Health of the City of Yonkers, 140 N. Y. 1, 35 N. E. 320 (1893).
[9] N. Y. Laws 1855, c. 270.
[10] Copcutt case, *supra* note 8, 140 N. Y. 1, 7, 35 N. E. 320, 321 (1893).
[11] Health Dep't of City of N. Y. v. Rector, etc. of Trinity Church, 145 N. Y. 32, 39 N. E. 833 (1895).

disease was made part of the equipment of scientific control, not to mention the advances since that time.

THE EXPERT CRITERIA—ADMINISTRATIVE EFFECTUATION

As a problem in strategic organization of governmental authority to accomplish an administratively increased role in shaping legal policies, the basic difficulty lies in providing a mechanism that will give maximum significance to administrative action before the results of this action are subject to judicial review. Administrative action, then, becomes the more significant to the extent that it supplies results which give clearest support to itself from the vantage point of judicial officials. The problem is not to avoid a method of judicial review, but rather to create a situation in which the administrative determination of the public interest behind a finding and conclusion is so well supported as to cause the judiciary to give presumptive weight to an administrative conclusion. The attainment of this objective has two aspects; substantive, in which the criteria is established and defined against which sub-standard housing is measurable and procedural, in which the evidence producing devices bring together data under circumstances supporting a conclusion that maximum fairness compatible with resources has been part of the processes. As long as either the substantive criteria, or the procedural standard of fairness is undeveloped, the administrative presumption of expertness can hardly be attained. This general condition can be expected to exist, both as to area elimination, and particularized elimination, of sub-standard housing.

POLICY MAKING

Probably the pyrrhic victories of health administrators, with the resulting curtailment of the jurisdictional review related to the nuisance criteria, was a cause of shifting emphasis in health administration to education, with de-emphasis upon enforcement. But effective administration involves a skillful blending of persuasion and coercion in situations involving regulation and prohibition. The rule-making functions cannot be treated as separate from the enforcement functions anymore than the educational aspects can be divorced from the enforcement aspects of administration. Rules must be made with both an educative purpose as well as to provide a basis for enforcement processes. There will normally be a willful few beyond the reach of an appeal directed to social interest or patriotism. The relative use of education and persuasion and coercive processes is a critical issue in any administrative system. Certainly the consideration of administrative elimination of sub-standard housing involves this matter. Elimination must come only after criteria have been established and understood and socially accepted as a reputable purpose of power. There must be recognition of honest attempts at correction which are within the range of toleration and the toleration point must be relatively explainable, both to the average citizen and to an appellate body of judges or legislators. Policy making then, has a double aspect: one is the establishing of general principles within the scope of public understanding and support; the other the making of a

relatively particularized body of rules and regulations which provide guidance to the enforcement processes and clarify the standards which are to be imposed.

No agency, not particularly able to evaluate the status of public reaction, could be expected to properly place emphasis upon relative general education, particular persuasion of individuals, and enforcement processes. This matter is broader in its implications than the simple coordination of technical information through which various experts come to a common conclusion. It involves taking into account the nature of organized opposition to changed restrictions upon property uses and the utilization of devices and techniques to overcome this resistance or adapt to it before critical test cases emerged which can unsettle basic authority and power. It involves the careful evaluation of the various responses which exist to projected policies and the realization that democratic processes require patience by experts, but not abandonment of hope.

There is need for an agency to coordinate basic policy relative to housing standards. This agency should have authority to reduce such policy, once it is adequately supported, to rules and standards. At present the expertness that relates to housing standards is distributed beyond hope of common action. The key to the arch of housing regulation has been, and promises to continue to be, the germ theory of disease and its ramifications. But structural safety and fire prevention play a part. The prevention of moral hazards and crime is significant in evaluating a particular dwelling or a dwelling area. Recreation has a claim of its own. Aesthetics is becoming more important. Housing standards must emerge through the consolidation of these specialties into a common pattern. At present the structure of the administration disrupts, through jealousies and fear of reduction in status of existing units, the very units in which the expert competence exists and which must be marshalled if a united front is to be developed to support maximum administrative finality.

There have been many experimental agencies which might be looked to as suggestive guides for meeting the demand for a consolidated concentration of expertness relative to housing. In a sense the history of public health administration, starting with the Act of 1801, evidences the problem. The Public Health Council, in New York State, is more than a rule making agency; it is a sounding board and a broadly representational collection of experts in a single competence. The Board of Examiners, under the Charter of 1901, in New York City, was an example of representational organization combining expert competencies. Public safety agencies in many cities are devised as composites to combine two or more expertnesses into a unified administrative pattern. The experience under the McCall Act[12] not only emphasizes the nature of the problem, but indicates the necessity of careful definition of power and duty of representational bodies having jurisdictional relations with existing departmental units.

Politically, it is generally desirable to utilize existing structure in so far as possible, rather than make change dependent upon new organs of government. Changes in

[12] N. Y. Laws 1933, c. 764. For a discussion of the inter-agency conflicts arising from the McCall Act, see MCGOLDRICK *et al.*, *supra* note 1, at 111 *et seq.*

structure should normally be made only when the long term political direction seems to provide a basis for new loyalties and new technical competencies to be combined. It would seem that conditions of this type are present relative to housing. There is no doubt but that the present governmental organization contains the essential expert technical competencies needed to achieve fuller realization of housing conditions and that the political direction is sound and supported by technical data. But there is a lack of coordinating authority. This must be introduced by one method or another. After puzzling over the matter for considerable time the following suggestion seems worth making. There should be an agency representing the heads, or designated official near the headship, of each department in each city seeking to undertake the elimination of sub-standard housing and this agency should, by authority of state law, clear all policies relative to housing regulation. It should have a duty to approve all regulations, in the technical sense, issued by any agency in the city government and make such additional regulations as it considers necessary after full opportunity for public hearings and consultation with potentially affected parties. Unless a new over-all quality in housing expertness developes—and presumably would through university projection of present programs—the leadership in such an authority would seem logically best placed in the health officer. Even without statutory authority an advisory agency of the type here indicated would seem desirable. Consideration of the relation of housing to enforcement, however, will indicate weaknesses in an advisory agency if it is developed to coordinate educational processes, rule making, and act as hearing body in enforcement cases.

Two separate principles are involved in the clarification of policy as the foundation for standards, rules and regulations supporting enforcement processes. The first is the coordination of expert resources. The second is the method of procedure. Procedural methods are involved in the coordination of resources in the sense of establishing working relations to maintain representation of specialities so that the enforceable rules reflect the combined expertness of the participant sciences. Beyond this, however, there is a problem that is more or less independent of the organization of the rule making authority. The methods of rule making are subject to certain conditions if maximum authority is to be found in them for purposes of meeting attacks in court processes. A basic problem in elimination of sub-standard housing lies in creating an enforceable standard able to provide relative finality when countered by the traditional standard of protection of property interests. A particular enforcement directive or order when clearly supported by compliance with a carefully determined body of rules specifying, in so far as possible, the standard against which illegality is projected has a much greater chance of being given the degree of presumptiveness which is the essence of administrative finality, than the same directive or order made against a previously unstated body of rules.

The methods of rule making involve broad respect for democratic participation by interested and affected parties, as well as maximum integration of scientific specialties. Even if the regulation and prohibition of sub-standard housing is in the

health department, as the only operating authority able to undertake the problem, success can be enhanced if attention is given to creation of a formal rule making process utilizing democratic principles in so far as possible. No rule should be promulgated until it has been subject to scrutiny and criticism of those it would control. No administrator should presume the authority to announce rules in final form until after a maximum conciliation and adjustment has been made in light of interested parties' scrutiny and criticism. The explanation for a rule, shown in the processes of development to be subject to critical antagonism, should be authoritatively made at the time the rule is announced. In so far as possible, a mechanism for appeal of the rule, or the methods by which it has been developed, before any enforcement is undertaken, should be provided. Again, the announced rule should be critically evaluated as to the timing of its going into effect; a prospectively operating rule will give better chance for educational processes and adjustment. To some extent these matters are psychological in nature, and competence in administrative processes must include understanding of psychological responses. As a general principle it is much easier to face opposition and criticism in the rule making processes than in the enforcement processes because there is no gauntlet down on the administrator's part. And if opposition is fully heard and every consideration made to accommodate legitimate interests in the processes of development of a rule, the rule's validity in subsequent attack is greater. It might be suggested that the basic defect in seeking enforcement through the summary type of process associated with nuisances, is largely in the absence of a prior, well thought through rule making process to support the action of the official. As a consequence the administrator tends to find himself caught in the judicial processes with a minimum of record support for his action in relation to his professional standards.

ENFORCEMENT

The basic problem in successful enforcement in an administrative system, when an evolving scientific standard is sought to be advanced to the modification of a traditional standard of property values, is the creation of a compelling body of data supporting the scientific standard, and proof that this standard has not been respected in the particular case under consideration. No statute can ever be expected to provide the scientific foundation for eliminating sub-standard housing because of its technical and evolving nature; the most a statute could do in providing substantive standards would be to indicate general conditions and leave the working rules to administration. A statute might outline the methods, in general terms, of enforcement; but no statute could provide the detail and intricate pattern adapted to particular cases without freezing experimentation and defeating the possibilities of continued improvement. Again it must be emphasized that there is a tradition in our system that is common to competent administration and to competent judicial action. Enforcement, in this tradition, must give adequate notice of what is complained about in circumstances that the adversely affected person understands the

standard against which he is being held. There must be full opportunity for registering opposition to either the factual findings of the administrative processes, or the methods by which they were found. There should be unqualified reluctance, by administrators, to act upon undisclosed facts or upon values ascribed to "expert knowledge." If administration cannot disclose the basis of its expertness in particular cases in understandable terms, it is only fair, in a democratic system, to assume that non-disclosure may shield incompetence or ignorance. This does not mean that the adversely affected person need agree, nor fully understand the technical methods by which the administrator reached his conclusion, but the facts and their significance should be presented and under circumstances permitting cross-examination and presentation of conflicting data. And all of these matters should be clearly recorded. Without records a "review" either by a higher administrator, legislator, or court is meaningless. Simply stated, if there is to be given a strong presumption that the administrator has finality in construing the facts, the processes by which he operates must be disclosed.

Fairness in administration seeking to accomplish a scientific curtailment of previously recognized property freedom is essential if finality is to be accorded. The forms of fairness should respect the traditions of the judicial system if that system is to operate to maintain even justice. For this reason it becomes somewhat obligatory on administrators subject to judicial review and seeking to act in compliance with their obligations, to develop methods approvable upon judicial review. Fortunately this is normally not a very difficult matter because the recently expanded experience of administration generally provides adequate guide posts. But it would be quite impracticable to outline a method that would apply independently of particular jurisdictions, or outside of particular circumstances. A few suggestions, however, might be made that would seem to have generic application.

Some coordination might be achieved through unifying the inspectional processes relating to housing.[13] Coordination of inspectional functions, however, requires direction from authority able to interpret findings and relate findings to educational and enforcement policies. Either a coordinated inspectional system requires combination of specially trained inspectors, working jointly, or a category of generally trained inspectors able to represent the various expertnesses. The latter direction would tend to either falsely subordinate certain qualities, or result in a degree of training somewhat disproportionate to our traditional ideas of inspector competence and tend to put administrative superiors at the technical mercy of subordinates. To bring together a supervisory authority over such highly trained subordinates would require a new consolidation of expertness in its various ramifications at the policy making and controlling level. Moreover, without the development of a consolidated supervisory authority over housing "expertnesses" a unified inspectional staff would

[13] Some cities, the largest to my knowledge being Detroit, have experimented with coordination in inspectional processes but usually with indifferent success. I know of no situation, however, in which the inspectional coordination is under an authority which reflects, within itself, the integration of qualities which are necessary to bring maximum expertise to the foundation of housing regulations.

be subordinated to the particular expertness of its immediate superior. The utilization of any existing departmental unit for this supervisory purpose would create inevitable suspicion and potential jealously among governmental units.

Every inspection should be made with one eye on the possibility of starting an enforcement proceeding. Records should be kept in such shape that the original can be made available at every stage in the enforcement process and in form acceptable to judicial standards. The step in which the inspection record is determined to provide the basis for a follow-up examination of greater thoroughness should be recorded. Any and all attempts to obtain adjustment through conciliation or temporary relaxation of rules should be in writing and in usable form. These should be reviewed before a notice relative to a hearing is issued to be certain that no defects exist. The notice should clearly indicate the violation in terms of standards known, or reasonably knowable, to the party affected. The records, up to this point, should leave no opportunities for a later charge of absence of knowledge or care in seeking to obtain voluntary compliance.

Before a hearing is scheduled it would seem wise to check the record against any data available in any other department or governmental unit involved in any way with housing, health or police standards. This would be facilitated if an integrated housing authority exists and would be facilitated if copies of all records relating to housing were on file and subject to a composite index. If such a system is hopelessly impracticable, the voluntary system of requests may be all that is left. Absence of interest or jealousy as to jurisdictional interest may mitigate against success all too often in such situations. Every effort should be made, however, to pool all resources to support an enforcement that is proceeding primarily in terms of even a single departmental criteria. But the extent and nature of this pooled data should be known before a hearing is organized. The notice can possibly permit collaborative material to come into the hearing and the administrative record in the hearing processes, by incorporating data from such sources, can quite possibly add substantiation to findings and conclusions. But it would appear, in final analysis, that coordination beyond that possible through single department leadership would appear necessary if maximum resources are to be available in terms of all of the scientific evaluation possible within a governmental unit. If housing authority can be made to exist, it should have authority to make rules governing the conditions precedent to holding a hearing; these rules should permit clearance of particular cases as to construction of operating rules before hearings are scheduled, although the case should not otherwise be considered without opening an unnecessary door to the charge of unfairness.

The notice should fix the time of the hearing, the place, and the references in the notice should permit clarification of the rights of the parties and the general nature of the procedures to be followed without undue effort and time being required of them. The hearing should come before any order or directive requiring positive action has been issued. Early health legislation ran into unnecessary difficulties by

ignoring the distinction between ordinary cases in which time was not sufficiently pressing to warrant summary power, and the few cases involving summary power. When summary action is necessary—action taken before a hearing is included in the processes—the administrator places himself at an increased disadvantage and may even open himself to personal liability for illegal destruction of property values. But a hearing scheduled before action is taken, with an opportunity for administrative appeal and judicial review, before the action becomes operative will be adequate in the destruction of sub-standard housing. Since no suggestion is entertained that this type of control will substitute for the existing nuisance power in summary action cases, it will be considered that the scope of action is limited to places which are outside of the nuisance category, but within a newly developed category. These will include marginal places and possibly marginal areas. Because it is wise to proceed to establish administrative power in most likely situations first when a long term policy is involved, it would seem desirable that individual rather than area problems be confronted and attacked first, with a view to extending the doctrinal basis of action after it has been sustained in sufficient cases to warrant broader generalizations. A statute authorizing a housing authority should clearly distinguish the nature of jurisdiction over individual places from areas primarily of sub-standard places; it should also specify the time of the hearing at the early, rather than late, stage of the enforcement processes. A significant comment upon the timing of the hearing is the following, in relation to New York City experience in building regulation: "However, the very doctrines which endow administrative agencies with immunity from judicial attack, despite absence of statutory provision for a preliminary hearing, explicitly require that a hearing be held at some later state of the proceeding. This poses the question whether the requirement of a later hearing enables administrative determinations to be more easily overthrown than if a prior hearing were required instead. Under the subsequent-hearing doctrine the preliminary administrative decision, if made in the exercise of discretionary authority, is not final. In the hearing that follows the administrative decision, the administrator may have to carry a larger burden of proof in justifying his action than if he had rendered his decision after holding a hearing himself."[14]

The conduct of hearings, beyond the statement that they should be covered generally by rules made by the administrator and related to the type of problems involved, is beyond this paper. Statute should not provide the methods of conducting such administrative processes, but there should be a well established self-imposed form in so far as possible. The presentation of evidence at such a hearing need not become involved in oaths and complex devices, although no regard for informality will avoid the difficult questions of keeping witnesses on the subject at issue, or settle matters of admissibility of data. However, it is in point to indicate that questions of jurisidiction—the authority of the hearing agency to hear the particular dispute—should be taken up at the beginning of the hearings and this question disposed of

[14] McGOLDRICK *et al., supra* note 1, at 565.

in so far as possible before other matters are considered. As experience is had in hearings there should be periodic reevaluation of processes and operating rules. When experience permits it may prove desirable to codify the more generally used practices to guide participants and officials and simplify the processes by eliminating unnecessary discussion. In light of this comment it becomes obvious that rule making and enforcement cannot be fully separated; but the review and evaluation of enforcement experience can be through the channels of rule making rather than simply allowed to accumulate without deliberative evaluation as to significance. This outlook is frequently missing in the evolutionary development of administrative hearing systems, leading to unnecessary confusion.

In general it would appear that the establishment of a housing authority should provide such authority with power to hear enforcement cases. Since the number of cases probably, in most jurisdictions, would not be great enough to warrant a preliminary sifting after the decision is made to proceed with the hearing, it would seem that the authority itself could hear cases directly. This would reduce the inspectional officers to witnesses. It is strongly recommended, however, that such an authority have a designated officer of trained ability to aid in the preparation of cases. The same recommendation is desirable for action within single departments, although reliance may have to be placed upon an existing official, such as a municipal counsel or even a prosecuting attorney. Our legal system is not very clear as to responsibilities of such officials in matters of this kind, however. At any rate it is desirable for consultation between the person, or persons, responsible for preparation and organizing presentation of cases before a hearing body and the prosecuting attorney. This is emphasized when it is realized that in most jurisdictions the enforcement mechanism beyond the administrative hearing, with its subsequent directive or order, lies in the control of public prosecutors. Satisfaction of the prosecutor that the case is relative intact will go a long way to obtaining cooperative execution of administrative orders requiring prosecution.

The administrative hearing should utilize records in so far as possible, showing the process as well as the substantive data introduced. If no stenographic help is provided, it is necessary that the presiding officer summarize these matters. They should be submitted to the parties for corrections before the hearing is considered finally closed. The finding which will support the order or other action should be based upon nothing outside of the record. The disposition of data not considered valid or otherwise controlling should be indicated. The directive or order should be issued only after a time for mature evaluation of findings. Normally it should be issued only after clearance with the agency necessary to carry the enforcement beyond the administrative processes. This means, in the ordinary structure of our system, the public prosecutor. In a large unit, such as New York City, it might prove desirable to operate through a special prosecuting system representing the administrative authority, but this is not possible generally. Once the order or directive is issued the administrator becomes a witness in instances of judicial re-

view. If he has followed well considered rules, clarified his position in the record, and based his directive or order on evidence within the scope of his jurisdiction, his chances of success should prove good in any court process.

There is no good reason why a hearing record, based upon a careful body of rules reflecting the maximum regard of the interests of affected parties, should not support any challenge in the courts. Possibly the Board of Standards and Appeals, in New York City, should suggest possible comparisons. McGoldrick, Graubard and Horowitz, after examining the many possible pitfalls into which the administrative processes might fall, came to the conclusion that "the stubborn fact is, however, that in only a small fraction of the cases heard by the board, there is ever an attempt to upset the determination, and in less than twenty-five per cent of the cases that go to court is the attempt successful."[15] No system of enforcing regulations seeking to impose standards beyond those supported by existing legal doctrines can hope for compltee success; the long history of emphasis upon nuisance principles with its resulting review of facts stands as a particular hazard to be faced. Any experimentation must risk defeat, but care in building a system that sustains findings against previously made rules through representational considerations and keeps the rules in accordance with combined scientific standards need consider a defeat no more than a temporary set-back. The broad discretion in the health administration is at the root of this attack to improve living conditions; supported by the newer engineering and social understandings that open a door to richer living. Underneath the administrative detail must be a broad vision that permits defeat at particular points, but keeps the defeat limited to the type of judicial decision that provides guidance for the future. There is no good reason, with the type of attack previously outlined, that defeat in a particular case would be more than this. A sympathetic understanding of the role of the courts by administrators will go some distance toward permitting a sympathetic understanding of administration by the courts.

SUMMARY

A trouble with the long delayed attack upon sub-standard housing has been the absence of a criteria from which rule making processes and educational processes to make way for enforcement can be projected. There is no available mechanism to implement and give meaning to the various qualities of expertness scattered throughout our administrative structures and bring this into a composite entity for rule making purposes. This could best be met through the development, under statutory authority, of a separate housing administration for interested jurisdictions. The possibility of a state-wide appellate agency to coordinate local units has been considered too far removed from the immediate problems confronting cities today to enter into the discussion, but it should be noted as a significant method of adding authority to administrative decision. Even without a separate housing authority much can be done, particularly through health administration, to focus attention

[15] *Id.* at 622.

upon a rule making process and coordinate this into an educational and enforcement system. There is a possibility of greater coordination of inspectional systems operating through existing departments, but this does not seem particularly hopeful when compared with other methods of attack upon the problem. A hearing system before the issuing of orders or directives seems clearly desirable. A closer relationship with prosecutory officials, extending back through the entire enforcement processes can be considered of potential significance. Finally, success cannot be attained through the development of scientific knowledge, good resolutions or even a developed standard defining the qualities of sub-standard housing, without bringing these into well-thought-out processes by which a new concept of public interest is made part of our governmental system.

SOME LEGAL ASPECTS OF COOPERATIVE HOUSING

EDWIN YOURMAN*

Many veterans are today manifesting an interest in the formation of organizations through which they may obtain housing by group action. While all such organizations are popularly referred to as "housing cooperatives," many actually envisage the use of cooperative principles only in the acquisition of property. That is, they do not plan to manage and operate a housing development on a cooperative basis, but only to band together in constructing or purchasing homes after which the cooperative arrangement is at an end, each member becoming the title owner of the property occupied by him.

Others, however, wish to make further use of cooperative principles in the maintenance and operation of the project, whether it be an apartment development or one of separate homes. It is in planning an organization for this type of activity that the legal adviser is confronted with many legal problems foreign to the day-to-day practice of law. These are the problems that this article will attempt to discuss.[1]

Briefly, the purpose of this type of cooperative housing is to combine most of the advantages of home ownership with the economy and stability of large scale enterprise. In addition to attraction from the financial standpoint, it is claimed that in planning such projects more attention can be given to landscaping, recreational facilities and other factors related to the livability of the property than commercial necessity will allow in the case of property constructed for investment purposes.[2]

Membership in the cooperative housing organization is based upon the ownership of a specified number of its shares, if a trust or a stock corporation, or upon the payment of the required membership fee in the case of a non-stock corporation. The total amount to be paid by all members for their required holdings is that which is necessary to take care of the preliminary expenses, pay for the organization's equity in the property, and provide such working capital as is considered desirable. This

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[1] The economic principles of cooperative housing are considered here only where necessary to the discussion of legal problems. Those interested in a general treatment of this subject should obtain U. S. DEP'T OF LABOR, ORGANIZATION AND MANAGEMENT OF COOPERATIVE AND MUTUAL HOUSING ASSOCIATIONS (Bur. of Labor Statistics, BULL. No. 858, 1946) which is for sale by the Superintendent of Documents, Washington 25, D. C., at twenty cents per copy. Request might also be made of the Economics and Housing Finance Branch of the National Housing Agency for the "Guide to Organizing Mutual Housing Associations Under the Veterans' Emergency Housing Program" which it expects to publish within a short time. For legal problems relating to cooperatives generally, see PACKEL, THE LAW OF COOPERATIVES (1940).

[2] MERLE HENRICKSON, WHAT ABOUT HOUSING COOPERATIVES (booklet published by Co-op Builders, Detroit, 1945); BULL. No. 858 *supra* note 1, at 5.

total capital requirement is then apportioned among the dwelling units on the basis of the cost of construction of each, and the size, location, and other factors of desirability. Thus a definite capital contribution is assigned to each dwelling unit and each member buys the shares or pays the fee placed upon the unit he selects for occupancy. The right to the occupancy of the designated unit is thus an incidence of membership, but it also requires compliance with the terms and conditions which are fully set out in the instruments governing the method of operation of the organization. Each member is given a long-term lease, renewable at his option, which also specifies the terms and conditions of occupancy including the requirement of payment in advance of the monthly charges and adherence to the by-laws and rules of the organization.

The monthly charges are fixed by the managing body to provide the amounts necessary to meet current operating expenses, make the required payments on the debts of the organization, and contribute toward building up proper reserves. Any doubt as to the sufficiency of the charges is resolved in favor of an increase because the amount by which a charge proves excessive is refunded to the members annually or at other regular intervals. As will be later discussed, the amount of these rebates is not necessarily income to the organization for Federal income tax purposes.

THE FORM OF ORGANIZATION

In considering the legal form the organization is to use, the necessity of an entity which will provide limited liability is obvious. This precludes the use of a partnership (even a limited partnership requires at least one general partner), joint venture, unincorporated association,[3] or ownership and management of the property by the members as tenants in common.[4] It leaves for consideration a trust organization and several kinds of corporations.

The Trust Form

The trust form of organization for cooperative housing is discussed in an article on "Legal Phases of Cooperative Building,"[5] which describes an arrangement where the property is conveyed to a trustee who issues a declaration of trust. This states that the purpose of the trust is to allocate to the beneficiaries the exclusive right of occupancy of apartments according to the certificate of beneficial interest held by each, together with the use of public rooms and facilities during the life and subject to the provisions of the trust. The declaration then provides for mutual contributions (presumably monthly) to meet expenses, and sets out the obligations of each beneficiary, of which the following are examples: (1) to pay his proportionate share of the expense of operation; (2) to observe the rules which may be imposed from time to time regarding the use of the apartment and other facilities; (3) not

[3] 4 AM. JUR., *Associations and Clubs*, §41.

[4] While it does not necessarily follow that there will be unlimited liability because of a tenancy in common, the cooperative operation of a project would risk a holding that the enterprise constituted a partnership. 14 AM. JUR., *cotenancy*, §3.

[5] Otis H. Castle in (1928) 2 SO. CALIF. L. REV. 1.

to use or permit the apartment to be used for any purpose prohibited by the declaration of trust or by law; (4) to surrender possession upon termination of his rights under the declaration; and, (5) not to transfer any portion of his beneficial interest except in accordance with rules which might from time to time be adopted. In the event of default in the performance of a member, the trustee may sell the certificate of the individual involved at public auction.

Provision is made for the election by the beneficial owners of a board of governors to act in an advisory capacity to the trustee in supervising the operation of the project; but the ultimate power of control in all matters is vested in the trustee. The beneficiaries are bound by an agreement with each other and with the trustee not to partition, divide, or otherwise set apart any interest, legal or equitable, under the trust. However, upon the vote of a specified percentage of beneficiaries, the trustee must sell the property and divide the proceeds among the beneficiaries or convey the property to a corporation in which the beneficiaries are the shareholders. These obligations are summarized on certificates entitled "Assignment of Beneficial Ownership and Interest" which convey a specified fractional interest in the trust together with the right of permanent occupancy to a named apartment in accordance with the terms of the trust.

The trust arrangement does, of course, have flexibility and may be drafted to vary considerably from the type just summarized. It is thought, however, that any suitable plan which adequately protects the interests of all concerned will of necessity be quite complex. When it is considered that the law relating to trusts is neither as definite nor as well understood by lawyers as corporation law, it is seen that the task of safeguarding against legal pitfalls is rendered extremely difficult.

Moreover, the use of the trust form for a cooperative housing organization results in either the abandonment of democratic control by the members or a risk of personal liability on their part. This undesirable choice stems from the fact that even in states which recognize Massachusetts trusts, the right of members to manage the affairs results in their being held personally liable as partners upon the obligations of the enterprise.[6]

While the risk of personal liability is undesirable, the alternative to it under the trust form, the relinquishment of democratic control, is equally unsatisfactory. It would remove mutuality of responsibility in the management of the project and almost certainly invite an apathy which would be destructive of community spirit and morale. The right of the members to manage is such an important element in cooperation that it has been held to be a fundamental characteristic, the absence of which prevents an organization from obtaining statutory benefits granted to a cooperative.[7]

As Mr. Justice Brandeis described the purpose of farmers' cooperatives:

[6] 16 FLETCHER, PRIVATE CORPORATIONS (1942 Replacement) §8230; 2 SCOTT, TRUSTS (1939) §274.1.

[7] Keystone Automobile Club Casualty Co. v. Comm'r, 122 F. (2d) 886 (C. C. A. 3rd, 1941). *Cert. den.*, 315 U. S. 814 (1942).

"Besides promoting the financial advantage of the participating farmers, they seek through cooperation to socialize their interests—to require an equitable assumption of responsibility while assuring an equitable distribution of benefits. Their aim is economic democracy on lines of liberty, equality and fraternity."[8]

If, notwithstanding these disadvantages, the trust form is to be used, rules applicable to the internal organization of corporations may suggest a general outline for the trust plan.

The Corporate Form

The latitude which the corporate form will offer in formulating the organization depends largely upon the nature of the project and the incorporation provisions of the state. All states authorize the incorporation of business and non-profit corporations, but in addition, in some states it is possible to incorporate under laws expressly applicable to limited dividend housing corporations or cooperatives.

Limited Dividend Housing Corporations

The special incorporation of private limited dividend housing corporations has been authorized in at least 13 states as a means of making housing available to lower income groups and aiding in the elimination of slums and blighted areas.[9] In addition, Wisconsin has a statute[10] authorizing the incorporation of housing corporations similar to limited dividend corporations, but with some cooperative characteristics.

As the name indicates, these statutes place limitations upon profits and usually the states exercise regulatory functions through housing boards with respect to the operations of the corporations. In Delaware, New Jersey and New York special provisions open the way for the exemption of the property of these corporations from taxation.

With the exception of the Wisconsin statute, these laws are designed not so much for mutual or cooperative organizations, but rather to attract the capital of private investors to the low-cost rental housing field. There is nothing, however, to prevent a cooperative group from incorporating under them and receiving the tax exemption or other benefits offered. In that event, the necessity of complying with special regulations or furnishing reports to the state housing body, should not unduly restrict the organization's activities if it is interested in cooperative housing as opposed to speculative profits.[11]

[8] Dissenting opinion in Frost v. Corporation Commission, 278 U. S. 515, 536; 49 S. Ct. 235, 243, 73 L. Ed. 483, 495 (1929).

[9] ARK. STAT. (1937) §12256; CAL. GEN. LAWS (Deering, 1937) Act 3481, §1 *et seq.*; DEL. REV. CODE (1935) §5439; FLA. STAT. ANN. (1943) §424.10; ILL. STAT. ANN. (Jones, 1939) §63.20 *et seq.*; KAN. GEN. STAT. (1935) §17-2314; MASS. ANN. LAWS (1942) C. 121, §26E; N. J. STAT. ANN. (perm. ed.) §55:15-6; N. Y. PUB. HOUSING LAW §170 *et seq.*; OHIO GEN. CODE ANN. (Page, 1937) §1078-15; PENN. STAT. ANN. (Purdon, perm. ed.) §1601 *et seq.*; S. C. CODE (1942) §5271-18; TEX. CIVIL STAT. (Vernon, 1945 replacement) Art. 1524b.

[10] WIS. STAT. (1945) §180.04.

[11] The benefits and burdens of the law must be weighed in each particular case; e.g., the New York law, while opening the way for tax exemption, requires that any surplus remaining upon dissolution after payment of the par value of the stock plus accrued, unpaid dividends and interest, shall go to the state or municipal treasury. N. Y. PUB. HOUSING LAW §185.

The Wisconsin law[12] was enacted in 1919 in an effort to alleviate the shortage which existed at that time in housing for lower income workers. It allows the incorporation of housing companies to have in general the power of other corporations. Two classes of stock, common and preferred as to dividends only, are authorized, and the holders of either are entitled to one vote for each share. The common stock is to be held only by those renting housing from the corporation, while the preferred stock may be purchased by anyone, including a city or county government. Dividends may be declared only after a surplus fund equal to 2 per cent of the paid in capital has been accumulated, after which they may be declared on both classes of stock, but the dividends on the preferred stock may not exceed 5 per cent per year. The interest of a tenant in his lease and stock is declared to be exempt from execution to the same extent as a homestead in real estate.

A corporation organized under this law may cancel a member's lease only for a violation of the terms thereof, but a member may terminate it at any time by giving notice as the corporation shall require, up to 90 days. The corporation must then cancel the member's stock and return to him the amount he has paid on it or give him a note for that amount payable in one year at 5 per cent interest. Thus common stockholders can transfer their stock only to the corporation which may not resell it at less than par. Originally, there was no authority to convey the title to a home to an individual stockholder, but this was authorized in 1925 by an amendment of the act.[13] The corporation may decide to dissolve by a majority vote of all outstanding stock in which case the proceeds are divided among the stockholders.

The placing of a limitation upon dividends to be paid preferred stockholders is a feature of a limited dividend housing corporation, but joining the ownership of common stock with a right of occupancy of a dwelling unit presents an important features of a cooperative housing corporation. From this standpoint it is interesting to note that: (1) a shareholder may terminate his lease at any time and receive what he has paid on his stock; (2) the corporation may resell the stock at more than par value and thus realize a profit from new members; (3) the stockholders share in the profit upon dissolution; (4) the corporation may sell a shareholder the dwelling he occupies; and, (5) preferred stockholders (who are not tenants) have a voice in the management.[14]

These features might leave an organization open to the possibility that in times of low real estate prices so many members would withdraw that the corporation would be unable to find new members and would have insufficient liquid reserves to pay the withdrawing shareholders. On the other hand, in a high price period

[12] *Supra* note 10.

[13] Wis. Laws 1925, c. 321, WIS. STAT. (1945) §180.04(13). An interesting description of the operation of a corporation organized under this law is found in Garden Homes Co. v. Comm'r, 64 F. (2d) 593 (C. C. A. 7th, 1933). *Cf.* Amalgamated Housing Corp., 37 B. T. A. 817 (1938) *aff'd* without opinion 108 F. (2d) 1010 (C. C. A. 2d, 1940), which involved a corporation incorporated under the New York Law, *supra* note 9.

[14] The requirement in the statute that a reserve be established for the retirement of preferred stock indicates that it is authorized only as an expedient in financing and that the intent is ultimately to have full stock ownership in the tenants.

members would be tempted to purchase their dwellings purely for speculative purposes. Since they could resell at a high price the purpose of the statute of making housing available at a reasonable price to those with low incomes would be defeated. Also, if the preferred stockholders who have voting rights were not public spirited, they might exert pressure to end the project during a high real estate market in order to realize the profit involved.

This does not, however, render the Wisconsin housing corporation law unsuitable for a cooperative organization. The articles and by-laws could easily be drafted with an eye toward obviating these possibilities of project suicide.

Incorporation Under Cooperative Laws

In many states the cooperative association laws are designed only for agricultural marketing or other specific cooperatives and will not permit the incorporation of a cooperative designed to furnish housing to its members. Where, however, those laws are broader, they ordinarily provide the best basis of organization for a cooperative housing association.

An example of the difference between a cooperative association statute and one for the incorporation of a business organization may be had by reference to the Cooperative Association Act of the District of Columbia.[15] Under it, the cooperative is deemed a non-profit association. Each member has only one vote regardless of his holdings, and proxy voting is prohibited. The act provides that two-thirds of the members present at a meeting may remove a director or officer and to further insure democratic control, the articles or by-laws may provide for the holding of referendums upon acts of the directors. A member may be expelled by a majority vote in which event the board of directors must purchase his holdings at par value "if and when there are sufficient reserve funds." If a member wishes to withdraw, the association has a 60 day option to purchase his holdings at par. If that is not exercised, the member may sell them elsewhere *subject to the approval of the transferee* by a majority vote of the directors. If the directors fail to approve, appeal may be made to the members at the next meeting and their action shall be final, but if the vote is against approval of the transferee, the association must purchase the holdings "if and when such purchase can be made without jeopardizing the solvency of the association."

The act does not require an association to have an office or agent in the District of Columbia and it is not necessary that any individual connected with an association be a resident of that place. The association is specifically authorized to "conduct its affairs within or without the District of Columbia" and the fee for incorporation is only six dollars. These factors make the incorporation statute one which would be advantageous for use by an organization which intends to operate a cooperative project in any state, if the local laws relating to foreign corporations are not unduly onerous.

[15] D. C. CODE (1940) tit. 29, §801 *et seq.*, 54 STAT. 480 (1940).

Non-profit Corporation Laws may ordinarily be used in incorporating the association since, as will be pointed out in the discussion on taxation of cooperatives, there is really no pecuniary profit.[16] However, there are some exceptions to this general rule.[17] *General Corporation Laws* also may be used in the absence of a statutory prohibition,[18] but difficulty may be encountered when an attempt is made to provide for the policy to be followed in proxy voting, expelling undesirable members, restricting the transfer of stock, etc. While the corporation can often be given the power by the articles or by-laws to carry out the desired policy of these matters, limits may be prescribed by the statute of incorporation.

Size of the Share Subscription. It would seem to be in the members' interest to limit the capitalization of the corporation to the amounts necessary to defray organizational expenses, pay for the equity to be held, and provide working capital. In this way, the amount of shares issued to each member will be kept at a minimum. Also, there will be no unpaid subscriptions for the purchase of shares which would be a personal liability of the subscribers in the event of insolvency.

A mortgagee might require that there be some personal liability of the members for the debt where the mortgage covers a large percentage of the value of the property, but this is not likely if the mortgage is to be insured by the Federal Housing Administration or if a loan to the cooperative can be insured or guaranteed by the Veterans Administration. Such insurance and guarantees will be discussed *infra.*

Proxy Voting. In the ordinary corporation stockholders who reside some distance from the meeting place or whose holdings are small, might be virtually denied a voice in the corporate affairs except for the allowance of proxy voting. But a member of a housing cooperative does not require this method of voting. Presumably the meetings will be held at the development where he resides. His interest, financial and otherwise, will closely approximate those of any other member. Moreover, if there is to be effective democratic control and the keen interest in project affairs so essential to its success, the meetings must be as representative as possible of the entire membership. Since proxy voting might be a deterrent to personal attendance and might be used as a tool to enable a few persons to gain control, the more prudent course would be to prohibit it altogether if the incorporation law allows.[19]

Expulsion of Members. If the corporation is organized under a cooperative or non-profit corporation law, a statutory procedure may provide for the expulsion of undesirable members. If not, or if incorporation has taken place under the general corporation laws, a provision in the charter or articles, or a by-law in force at the

[16] *In re* Estate of Pitts, 218 Cal. 184, 22 P. (2d) 694 (1933); Read v. Tidewater Coal Exchange, 13 Del. Ch. 195, 116 A. 898 (1922); 1 FLETCHER, PRIVATE CORPORATIONS (perm. ed., 1931) §§68, 112.

[17] State v. Home Cooperative Union, 63 Ohio St. 547, 59 N. E. 220 (1900). The Pennsylvania non-profit corporation law "does not relate to, does not affect, and does not apply to cooperative associations, whether for profit or not for profit." PENN. STAT. ANN. (Purdon, perm. ed.) §2851-4.

[18] The Pennsylvania business corporation law contains a provision similar to that quoted *supra* note 17 (§2852-4).

[19] There is no right to proxy voting at common law, 5 FLETCHER, PRIVATE CORPORATIONS (perm. ed.) §2050, but statutes generally require the corporation to allow it; e.g., N. Y. STOCK CORP. LAW §47; N. J. STAT. ANN. (perm. ed.) §14:10-9.

time of creation (or assented to by *all* the members) will usually confer this right.[20] The entire procedure for enforcement must, of course, be drafted with care in order to protect the members, both as a group and as individuals. One possible method is to make a violation of a term of the lease the ground for expulsion with complaints to be investigated by a committee appointed by the board of directors. The investigation would include the right of the member to be heard and if the committee recommended expulsion a membership meeting would be called which, after the presentation of both sides of the controversy, could expel the member by a two-thirds vote of those in attendance. If the member is expelled, his lease would be cancelled and he would receive notice to move. His stock or certificate of membership would also be cancelled upon the payment by the corporation of its original cost plus the proportionate share of any increases in the corporation's equity or other additions to capital. As an alternative, the payment for the holdings might be expressed in terms of the current book value or some other method of valuation capable of ascertainment and not too susceptible of dispute. In addition, if a refund is later made for the period during which the individual was a member, he would be entitled to his proportionate share of that. The important thing is to provide a procedure which will be both swift and just so that if the occasion for its use should unfortunately arise, the possibility of a permanent scar will be minimized.

Democratic Control. While the authority of the directors to carry out policy and matters of management must not be impaired, the members of a housing cooperative, unless it is an unusually large one, are in a better position to determine specific policies than stockholders of the ordinary corporation. Accordingly, regular membership meetings should be more frequent than the annual stockholders' meetings common to business corporations. Procedure for a referendum upon the acts of the directors and a right of recall of directors and officers would also strengthen membership control. Proper safeguards may be desirable, however, to prevent such hasty group action that ill-considered decisions would result.

Transfer of Membership. Since the success of the project depends upon the quality of the members and the ability of each to live in harmony with the others, it seems essential that where a member wishes to withdraw the organization have some voice in the approval of his successor. The organization must, however, act fairly since the ability of the withdrawing member to liquidate his holdings must be protected.

In addition to control with regard to the identity of the transferee, a decision must be made as to whether control will be exercised over the selling price of the holdings. This is a highly controversial matter of policy which should be settled at the outset. On the one hand, some may feel that if they risk their money in the success of the organization and later wish to withdraw, they should be entitled to all that the market will pay for their holdings. Others, however, will argue that in a cooperative project there is no place for the speculative factor. The purpose of mem-

[20] 12 FLETCHER, PRIVATE CORPORATIONS (perm. ed.) §5696.

bership is to provide economical housing and future members must be protected from paying a price which would give a retiring member a speculative profit; otherwise, the new members will not really be getting cooperative housing. Also, a high market might see a succession of members more interested in profits than in cooperating toward providing comfortable, economical housing for all.[21] Subleasing could also result in occupancy by non-members who would be forced to pay high rents to absentee members engaged in making a profit from the enterprise. Obviously this, too, is foreign to the purpose of a cooperative project. Accordingly, it is common to allow subleasing only where a member is to be temporarily away and even then regulate the amount he may charge.[22]

To prevent this type of degeneration, the by-laws and leases may provide that membership, share certificates, or leases, may not be assigned nor the premises sublet without the approval of the board of directors, or if the board refuses, without approval by a vote of the membership. These restrictions would also be printed on the certificates of stock or membership so there could be no claim or lack of notice. Notwithstanding the general rule which ordinarily prevents a restriction on the transferability of stock, those of this type have been held valid as necessary to protect the purposes of the corporation.[23] Control over the price to be paid by subsequent transferees may also be obtained by a by-law which would require a member to offer his holdings to the corporation at a specified method of valuation before selling elsewhere.[24] Exemptions from these requirements could be made for transfers to a spouse, child or parent, and for disposition in accordance with the terms of a will or the law of intestate succession.

Provision concerning these matters should be drafted with an eye to the fact that the subscription agreements, by-laws, leases, and other organizational plans must be construed together as a contractual arrangement.[25] Thus, where these instruments contain a procedure for terminating leases and do not reserve the right to alter that procedure, any change would be in effect a modification of the contractual arrangement made by all the members with themselves and with the corporation. The adoption of a new by-law providing a new procedure would therefore require the unanimous assent of the stockholders.[26]

Dividends. As will be discussed later, receipts of a housing corporation which are later distributed to the members as dividends on the stock, are considered income subject to the Federal income tax, but receipts distributed as patronage refunds are

[21] It is evident, however, that if the property is acquired during a period of high costs, a member who started with a sizable equity does risk, if he later wishes to withdraw, having to sell his holdings at a loss, or even being unable to sell them at all, because of a low market.

[22] WOOD, RECENT TRENDS IN AMERICAN HOUSING (1931) 172; 4 ENCYCLOPEDIA OF THE SOCIAL SCIENCES (1935) 517; BULL. No. 858, *supra* note 1, at 33.

[23] 68 Beacon St. v. Sohier, 289 Mass. 354, 194 N. E. 303 (1935); Penthouse Properties v. 1158 Fifth Avenue, 256 App. Div. 685, 11 N. Y. S. (2d) 417 (1939).

[24] 12 FLETCHER, PRIVATE CORPORATIONS (perm. ed.) §§5456, 5457.

[25] Tompkins v. Hale, 172 Misc. 1071, 15 N. Y. S. (2d) 854 (1939), *aff'd*, 284 N. Y. 675, 30 N. E. (2d) 721 (1940).

[26] *Ibid.*

not taxable. Since stock ownership will in general be proportionate to monthly charges, a member will receive about the same amount irrespective of whether the dividend or refund method of distribution is used. Also, by adopting a by-law which clearly removes any possibility of profit-making by the corporation, or the payment of dividends by it, its claim to a non-profit status (even though it is organized under a general incorporation law) would obviously be strengthened.

Lien on Stock. If the by-laws provide that the corporation will have a lien upon the members' stock or other holdings for the monthly charges, a statement to that effect should appear on the certificate of stock.[27]

FEDERAL INCOME TAXATION

If an individual homeowner allots $50 from his pay each month for repayment of the mortgage on his home any increase in his equity at the end of the year represents a savings from the monthly payments rather than new income to him. Similarly, when a housing cooperative is viewed simply as a group of individuals, each of whom is purchasing what amounts to ownership of a home—the right to live in a particular dwelling—it is apparent that there should be no income tax liability for the amount by which its receipts exceed expenses.

The applicability of this analogy, however, depends upon the disposition the cooperative corporation makes of its receipts. If they are refunded to members on the basis of patronage, they are not income for they are not a division of profits but instead a return of the overcharge.[28] On the other hand, if receipts are distributed on the basis of the ownership of stock, that is, as earnings on the capital investment of the stockholders, they are taxable as income to the corporation.[29]

In the case of a housing cooperative, as has already been pointed out, the ownership of stock ordinarily is in proportion to the desirability of the unit occupied and hence to the monthly charge. Thus, whether the distribution is in the form of a dividend on stock ownership or a refund of monthly charges, a member is apt to receive about the same amount. With respect then, to the charges to be distributed to members, it would seem easy to bind the corporation to return them in the form of patronage refunds and incur no liability for income tax.

However, all collections from members which are not used for expenses cannot be refunded because payments must be made on the principal of the mortgage and reserve funds should be built up to meet various contingencies. Since this constitutes an increase in the net worth of the cooperative the question arises whether it evidences the receipt of taxable income.

[27] 8 FLETCHER, PRIVATE CORPORATIONS (perm. ed.) §4207 and *id.* Vol. 11, §§5264, 5265.

[28] Uniform Printing and Supply Co. v. Comm'r, 88 F. (2d) 75 (C. C. A. 7th, 1937); Packel, *Cooperatives and the Income Tax* (1941) 90 UNIV. OF PA. L. REV. 137, 151; G. C. M. 17895, C. B. 1937-1, 56. But the following recent cases have further required that at the time the money was received, the articles, by-laws, or a contract imposed a liability on the association to return excessive charges in the form of patronage refunds: American Box Shook Export Ass'n v. Comm'r, 156 F. (2d) 629 (C. C. A. 9th, 1946); United Cooperatives, Inc. 4 T. C. 93 (1944).

[29] Farmers Union Co-op Co. v. Comm'r, 90 F. (2d) 488 (C. C. A. 8th, 1937).

If it can be said that the increase represents profits made by the corporation in dealing with those to whom it has rented housing, there is taxable income.[30] On the other hand, the tenants are also the stockholders (or, in a non-stock corporation, the holders of certificates) and if the increase in net worth came as the result of capital contributions from them, it is not taxable as income.[31]

Thus, a provision in the by-laws or leases that any charges not used for expenses or refunded to the members will be credited upon the books of the cooperative as contributions to capital accounts will save the corporation from Federal income tax liability.[32] This is not a tax-dodge but only a fair result, for, as has already been pointed out, the increase in capital which results from the members' payments is no more new income than is the enlargement of a homeowner's equity.

But when the homeowner computes his taxable income, he may also deduct the interest charges on his mortgage[33] and the real estate taxes on his home.[34] The opportunity for a similar deduction is given the individual members of a housing cooperative by Section 23(z) of the Internal Revenue Code.[35] That section allows a "tenant-stockholder"[36] of a "cooperative apartment corporation"[37] to deduct his proportionate share of taxes and interest paid or incurred by the cooperative in computing his individual income tax liability.

[30] Amalgamated Housing Corp., *supra* note 13. *Cf.* San Joaquin Valley Poultry Producers' Ass'n v. Comm'r, 136 F. (2d) 382 (C. C. A. 9th, 1943), with Cooperative Oil Ass'n, Inc. v. Comm'r, 115 F. (2d) 666 (C. C. A. 9th, 1940).

[31] 874 Park Ave. Corp., 23 B. T. A. 400 (1931); and I. T. 1469, C. B. I-2, P. 191 in which the Commissioner of Internal Revenue ruled:

"Considering the specific provision of the proprietary lease for crediting payments made by the stockholders for the reduction of the mortgage indebtedness or for other capital expenditures to the 'paid-in surplus' account in connection with the fact that the books of the corporation reflect the amount of the assessment payments used for such purposes and that the stockholders are advised of the respective amounts so applied, it is held that the portion of the assessment payments credited to the 'paid-in surplus' account . . . is in the nature of a voluntary assessment upon the stock held by the individual proprietary lessees, which, under Article 544, Regulation 62, represents additional cost of such stock, and does not constitute income to the corporation."

[32] *Ibid.* For the right of a cooperative organized to furnish low-income families housing to an exemption from Federal income taxes as a non-profit civic organization under what is now Section 101(8) of the Internal Revenue Code [26 U. S. C. A. §101(8)] see the two cases cited *supra* note 13. (The organizations there involved did not treat their reserves as capital contributions; hence the claim of tax liability.)

[33] Sec. 23(b) of the Internal Revenue Code. 26 U. S. C. A. §23(b).

[34] *Id.*, §23(c); 26 U. S. C. A. §23(c).

[35] 26 U. S. C. A. §23(z).

[36] The section defines "Tenant-stockholder" as:

"An individual who is a stockholder in a cooperative apartment corporation, and whose stock is fully paid-up in an amount not less than an amount shown to the satisfaction of the Commissioner as bearing a reasonable relationship to the portion of the value of the corporation's equity in the building and the land on which it is situated which is attributable to the apartment which such individual is entitled to occupy."

[37] The section defines "cooperative apartment corporation" as one:

"(i) having one and only one class of stock outstanding,

"(ii) all of the stockholders of which are entitled, solely by reason of their ownership of stock in the corporation to occupy for dwelling purposes apartments in a building owned or leased by such corporation, and who are not entitled, either conditionally or unconditionally, except upon a complete or partial liquidation of the corporation, to receive any distribution not out of earnings and profits of the corporation, and

"(iii) 80 per centum or more of the gross income of which for the taxable year in which the taxes and interest described in paragraph (1) are paid or incurred is derived from tenant-stockholders."

The reference in that section to "cooperative apartment corporations" raises some question as to whether the member of a cooperative which owns single family dwellings would be entitled to the deductions. No interpretation has been found, but it is thought the word "apartment" in the statutes should include all units of a cooperative regardless of whether they are are all in an "apartment" building.

FINANCING

In obtaining that part of the project's cost which is not to be paid for from capital contributions, any of the many forms of corporate finance may be used, but first mortgage financing offers the least complex method and one which the entire membership is most likely to understand. This may take the form of a construction loan with refinancing upon completion, or construction advances under an arrangement whereby the advances become the loan in definitive form.

It would be advantageous if the mortgage permits voluntary prepayments of the mortgage principal with a consequent reduction in interest, and provides that the debt will not be in default because of the non-payment of principal so long as the total amount credited to the repayment of principal equals or exceeds what would have been credited had only the regular monthly payments been made. In this way the reserves of the cooperative may be applied to the debt as advance payments. The interest saved will exceed what could be realized from any safe, liquid investment, and whenever the cooperative wishes to draw upon the reserves (for example, to make repairs or purchase the holdings of a retiring member) it need only withhold the necessary amount from the next monthly payment to the mortgagee.

Section 608 of the National Housing Act, as amended,[38] allows the Federal Housing Commissioner to insure mortgages on a housing project built by a corporation for an amount up to 90 per cent of the necessary current cost of construction of the property. If the mortgage exceeds $200,000 the Federal Housing Commissioner requires that he be assigned shares of special stock "or other evidence of beneficial interest in the mortgagor" by which he will acquire majority voting rights during the period of any default on the mortgage or a violation of any agreement relating to it.[39] If special stock is issued for this purpose, the cooperative would apparently fail to meet the requirements of Section 23(z) of the Internal Revenue Code, *supra,* because there would be more than one class of stock, and thus the members could not deduct their proportionate share of interest and taxes in computing their individual Federal income tax liability. A cooperative, however, in this situation might be able to arrange with the Federal Housing Administration to come within the terms of Section 23(z) by a contractual arrangement or a by-law which would give the Commissioner control of the organization during a period of default or violation.

[38] 12 U. S. C. A. §1743.

[39] FED. HOUSING ADM., ADMINISTRATIVE RULES AND REGULATIONS FOR RENTAL HOUSING INSURANCE UNDER SECTION 608 OF THE NATIONAL HOUSING ACT (pamphlet, August 15, 1946) 16. This pamphlet may be obtained from any office of the Federal Housing Administration and should be consulted for the specific conditions under which loans are insurable. The "Guide," *supra* note 1, is expected to contain a thorough discussion of the various types of financing adaptable to the use of a housing cooperative composed of veterans.

Since a cooperative organization formed today is likely to be composed of veterans of World War II, the question arises as to loan benefits under the Servicemen's Readjustment Act of 1944, as amended[40] (hereafter referred to as the GI Bill). Under Section 501 of that Act as amended, 50 per cent of a loan to a veteran for purchasing or constructing residential property will be guaranteed by the United States but the total amount guaranteed may not exceed $4,000. Under Section 505, where a veteran's home loan is approved for insurance by the Federal Housing Administration, the Veterans Administrator may guarantee the full amount of a second loan if it does not exceed 20 per cent of the purchase price or cost of the property. This enables the veteran to obtain 100 per cent financing.

A third type of loan under the GI Bill is provided for in Section 508 which specifies that in lieu of a guaranteed loan, certain financial institutions may agree for insurance of an amount equal to 15 per cent of the aggregate loans made or purchased. Under this arrangement the Veterans Administration will pay the full amount of losses of the approved financial institution except that the total amount it pays may not exceed 15 per cent of all such loans made or purchased by the institution.

Where any loan is guaranteed, the Veterans Administration pays an amount equal to 4 per cent of the amount originally guaranteed, such payment to be applied on the loan.[41] If the loan is insured, the veteran gets the benefit of a similar payment.[42]

But the present interpretation of the Veterans Administration seems to be that these provisions are in general applicable only to loans directly to the individual veteran and that in the case of a loan for a home, the veteran himself should hold title. Thus the current regulations of the Veterans Administration provide that there will be no automatic guarantee or insurance of a loan which is made

". . . for the purchase of a home or as part of a housing development, cooperative or otherwise, existing or to be constructed: (a) the legal title to which home is not to be held directly by the veteran in the form of a separate estate in real property; or, (b) which is a departure from the conventional type of single family form of housing, nor to any loan for business or farming purposes which is in excess of $25,000, or is related to an enterprise in which more than ten veterans will participate.

"No such loan or loans will be eligible for guaranty or insurance without the prior approval of the Administrator, who may issue such approval upon such terms and conditions, not inconsistent with the act, as he may deem proper."[43]

Under this regulation, loans to a housing cooperative cannot be guaranteed or insured under the G. I. Bill unless there has been prior approval by the Veterans Administrator. This requirement that cooperatives be considered on an individual

[40] 38 U. S. C. A. §694.

[41] Sec. 500(c) of the Act, 38 U. S. C. A. §694.

[42] Sec. 508(c) of the Act, 38 U. S. C. A. §694i(c).

[43] §36.4343, Veterans Administrator's Regulations Under Servicemen's Readjustment Act of 1944, 11 FED. REG. 9701 (1946) §36.4350 of these regulations (11 FED. REG. 2125 (1946) provides that a merchantable title includes a leasehold estate for not less than 14 years from the maturity of the loan.

basis is no doubt an indication that the Veterans Administration has not yet formulated a definite policy regarding them and thus wishes to have the benefit of examining proposed methods of operations. It is hoped that as the result of the experience thus gained the Veterans Administration will announce the type of cooperative organization which can obtain a loan eligible for guarantee or insurance under the G. I. Bill. Even should the very strict view prevail that the G. I. Bill does not extend to a loan directly to a cooperative, it would still seem to permit the use of a cooperative plan whereby loans would be eligible when made to each individual member on the security of an estate in the property to be occupied by him. The disadvantage of this later method is the complexity incident to granting title or a long term lease to each unit to the member who is to occupy it. Also, the necessity of a long term loan on which an individual would be personally liable even though he left the project would deter many from becoming members.

INDIVIDUAL VS. CORPORATE TITLE

In forming the cooperative, especially if the project is to consist of single family dwellings, the question is almost certain to arise: "Why can't title to my house be in my name with the cooperative performing services incidental to its operation and maintenance?" This, indeed, is a question with many angles. Title ownership offers more than a mere feeling of security: ordinarily where the property owned is a homestead, it has a statutory exemption from execution for the debts of the owner. This policy which has for its purpose the encouragement and promotion of the stability of home ownership, has been implemented in some jurisdictions by allowing tax exemptions for homesteads.[44] Also, some states allow a special tax exemption for property owned by veterans.[45] While no case directly in point has been found, it is thought that a member of a housing cooperative would be unable to avail himself of these privileges except to the extent that the state law may make them applicable to a lease on a home.[46]

Another argument in favor of having title in the individuals is that so long as a member meets the mortgage payments on his home he cannot lose it, whereas if title is in a cooperative which becomes insolvent, those members who are not in default also lose their holdings. It may be said in refutation, however, that in unity there can be strength and by building reserves, the cooperative can carry members

[44] E.g., ALA. CODE (1940) tit. 51 §15; ARK. STAT. (1944 Supp.) §13702a *et seq.*; FLA. CONST. Art. 10, §7 and FLA. STAT. ANN. (perm. ed.) §167.72; LA. CONST. 1921, Art. 11, §§1, 4 and LA. GEN. STAT. (Dart, 1939) §3805; MINN. STAT. (Mason, 1940 Supp.) §1993; MISS. CODE (1942) §9714; OKLA. CONST. Art. 10, §22 and OKLA. STAT. ANN. (perm. ed.) tit. 68, §34; TEX. CONST. Art. 8, §1-2; Wyo. Laws 1945, c. 42.

[45] E.g., N. M. STAT. (1941) §76-111, 113; N. Y. TAX LAW §4(5) (Property purchased with the proceeds of a pension, bonus, or insurance exempt from taxation); UTAH CODE (1943) §80-2-4 (property of disabled veterans); Wyo. Laws 1945, c. 140.

[46] See the following cases which considered the members not as owners, but as lessees having rights against and obligations toward the corporation which is the owner. Prudence Co. v. 160 W. 73rd St. Corp., 260 N. Y. 205, 183 N. E. 365, 86 A. L. R. 361 (1932); Shaffer v. 8100 Jefferson Ave. East Corp., 267 Mich. 437, 255 N. W. 324 (1934); *In re* 325 East 72nd St., Inc., 173 Misc. 347, 18 N. Y. S. (2d) 159 (1940).

who must temporarily be in default. An actual example is that of the Amalgamated Housing project which, although it was built during the high cost era of 1926, was able to carry $160,000 in back payments for families during 1932 and 1933.[47] It can be noted, too, that if a member makes only a small equity payment, he actually has little to lose because his monthly payments should not be in excess of, and will probably be less than the rental value of the unit he occupies.

No attempt will be made here to set out the variety of plans which can be devised to join individual ownership with cooperative management and operation. The only limits are the ingenuity of the legal advisor who can judge at first hand the desires and needs of the particular group with which he is working. The two basic plans, however, would seem to be for the members to hold legal title and contract for the services of the organization on a cooperative basis, or to have legal title to each unit held by a corporation as trustee for the occupant. Either plan would require separate mortgages for each unit and for that reason might be difficult to finance, especially if the mortgage is not to be insured. The plan whereby the cooperative, or a separate corporation, holds title to each unit separately as trustee must be distinguished from the trust form of organization discussed earlier. The organization holding title as trustee would not manage the project by virtue of being trustee; its only trust function would be to hold title. Management would be carried on preferably by a separate corporation, with members as the sole stockholders.[48]

THE WAGNER-ELLENDER-TAFT BILL

The Wagner-Ellender-Taft Bill, if enacted as it passed the Senate at the last session of the Congress, will afford aid to groups interested in cooperative housing by: (1) providing a redevelopment program to make desirable locations, which now comprise blighted and slum areas, available for private purchase and use in accordance with redevelopment plans;[49] and, (2) offering special mortgage insurance which would be confined to areas where there is a need for new dwellings for families of lower income which cannot adequately be met by privately financed construction. This special insurance would be available for: "a mortgage with respect to (i) a project of a nonprofit mutual ownership housing corporation the occupancy

[47] HENRICKSON, *op. cit. supra* note 2, at 1, 3.

[48] BULL. No. 858, *supra* note 1, suggests that:

"If financing or other compelling reasons make necessary the giving of individual titles to the members, safeguards such as the following should be imposed: A recorded option whereby the association reserves the right to buy the property at any time at a stipulated price, minus depreciation computed according to a stipulated formula; a recorded agreement (embodied in the option) that no sale to any other person or organization may be made until a specified time after the association has been notified of intention to sell; an agreement that premises shall not be rented to nonmembers except with the permission of the board of directors of the housing associations and under terms specified by it, and in no case for longer than 6 months or 1 year; and provision in charter and bylaws that in the event of dissolution of the association, all property shall be sold through it, with any surplus of funds realized in excess of actual investment, minus depreciation, to be distributed in some form entailing no profits to individual members (such as by donation to housing authority or State board, or to a fund for promoting the cooperative movement)." (Page 27.)

[49] Title VI of the Wagner-Ellender-Taft Bill as it passed the Senate, 79th Cong., 2nd Sess. (1946).

of which is restricted to members of such corporation, (ii) a project constructed by a nonprofit corporation organized for the purpose of construction of homes for members of the corporation, (iii) a project undertaken by an educational or training institution (as defined in the Servicemen's Readjustment Act of 1944, as amended) primarily for the purpose of providing adequate housing accommodations for student veterans, or such veterans and their families. . . ."[50]

A mortgage could be insured if it is not for in excess of 95 per cent of the estimated value of the project when completed and it could have a maturity of not over 40 years from the date of the insurance. The interest rate on such loans could not exceed 3½ per cent per year. This type of insurance would attract private capital to the high percentage financing of qualified projects for long terms at low interest rates and thus give the lower income group an opportunity to start a project with a small down payment and with lower monthly charges since repayment would be spread over a longer period of time.

CAVEAT EMPTOR

It is elementary that the primary purpose of a cooperative of any type is to provide an economical service to members by eliminating speculative profits. Yet, profit-seeking promoters have found a fertile field in so-called "cooperative apartment projects" in metropolitan areas. One method is for a promoter to organize and own all of the stock of a corporation which acquires an apartment building. The stock is allotted to apartments and sold to tenants under much the same arrangement as is found in a real cooperative except that the promoter sells the stock at whatever profit the traffic will bear. Before disposing of the stock in the "cooperative," he may contract to manage it for a generous fee.[51]

These and similar schemes are easily detected by remembering that the promotion of a true cooperative is not a profit-making enterprise. While a contractor who builds for a cooperative will, of course, make a profit on his contract, no person connected with the cooperative itself should be allowed to personally profit at the expense of the organization. Thus where a promoter sells stock in a so-called cooperative apartment project at 50 per cent above cost to him,[52] if there is any "cooperation" it would seem to be rather one-sided.

[50] *Id.* §404. Sec. 406 would help establish a market for mortgages on these projects through the Federal National Mortgage Association, a corporation wholly owned by the United States. That association would also be authorized to make preliminary advances at not to exceed 3 per cent interest, to make funds needed in the formulation of the project available.

[51] For an illustration of the difficulties which members of this type of "cooperative" may encounter, see Schaffer v. 8100 Jefferson Ave. East Corp., *supra* note 46.

[52] The facts recited in 50 East 75th St. Corp. v. Comm'r, 78 F. (2d) 158 (C. C. A. 2d, 1935) show that stock costing a promoter $67.20 per share was sold by him at an average profit of about $31.00. See also Schaffer v. 8100 Jefferson Ave. East Corp., *supra* note 46, where buildings which cost two million dollars in 1922 were in 1927 transferred subject to a mortgage of some $1,875,000, to a "cooperative" corporation in exchange for all of its stock. The capital of the "cooperative" totaled $2,050,000 and the promoter sold stock representing it to "tenants." Thus, by the time the tenants became stockholders of the "cooperative" the cost of acquiring the buildings was about twice what they had cost the promoter.

SUMMARY

Veterans are manifesting an interest in cooperative organizations in an effort to obtain more comfortable and more economical housing. The trust form of organization does not seem well fitted for it would afford limited liability for the members only by requiring the relinquishment of democratic control. However, the organization may be incorporated under limited dividend housing corporation laws, cooperative association laws, or non-profit or general corporation laws, depending on the law of the state, the type of project to be undertaken and the desires of the members.

A cooperative housing corporation should provide the stockholders with a greater voice in the management than is often found in the case of corporations. There is no need for proxy voting or dividends, and restrictions on stock transfers are desirable.

The corporation, if all its receipts are from members and are used for (1) expenses, (2) compulsory patronage refunds (instead of dividends), and (3) capital contributions, will incur no liability for Federal income tax. Also, if there is compliance with Section 23(z) of the Internal Revenue Code each member may deduct his share of interest and real estate taxes paid by the cooperative, in computing his taxable income.

The National Housing Act, as amended, offers insurance for a mortgage not in excess of 90 per cent of the estimated current cost of completion. The Veterans Administration has not yet announced a definite policy regarding the financing under the G. I. Bill of Rights of cooperatives composed of veterans.

A number of factors favor having legal title in the individual members or in trust for them severally, although such a plan would probably weaken the cooperative organization.

The Wagner-Ellender-Taft Bill, if enacted, would make available desirable locations in redevelopment areas and would offer more advantageous financing for mutual housing projects for lower income workers.

Cooperative housing offers promise, only if it is organized on the basis of cooperation. The cooperative is no place for the speculative promoter; high profits and management fees for him are inconsistent with the true goal of economical housing for members.

THE VETERANS EMERGENCY HOUSING PROGRAM

WILLIAM REMINGTON†

SKETCH OF THE PROGRAM

The Veterans Emergency Housing Program—usually alphabetized to VEHP—is the one major economic innovation of the Truman Administration. Conceived early in December, 1945, with the appointment of Wilson Wyatt as National Housing Expediter, the VEHP was born on December 20, 1945, with the issuance of Civilian Production Administration Priorities Regulation 33 which channels building materials into medium- and low-price housing.

With business and the Administration engaged in an almost fervent campaign to liquidate wartime production and distribution controls as rapidly as possible the VEHP struggled upstream against the trend throughout 1946, trying to boost the volume of housing construction to record levels, and to ensure that the houses which are built sell or rent at prices which veterans can afford to pay. Data now available indicates that about a million housing units will be started in 1946, if contractors proceed with plans for starting about 75,000 houses late in November and December in spite of uncertainty with respect to materials costs following price decontrol. Completions during the year are estimated at 700,000. This is a tremendous achievement even though it falls short of the 1946 goal by almost two hundred thousand.

The big question now with respect to the VEHP is one the President did not answer on November 9 when he announced decontrol of almost all prices and wages. With wages and building materials prices free to respond to the pressures of an uncontrolled and highly inflationary market, what happens to the Housing Expediter's 1947 program of 1.5 million starts on medium- and low-priced houses? What happens to construction costs on the hundreds of thousands of houses started this year which are not yet completed? As of November 15, 1946, when this is being written these questions cannot be answered.

It is clear that the VEHP will continue. In his decontrol announcement the President said: "The removal of price ceilings on building materials will obviously necessitate a change in the approach to some of the problems in the housing program. I am asking the Housing Expediter to report to me promptly in this regard. We must continue an aggressive program of building houses and apartments for veterans."

* The reader will bear in mind that changes in this program have been made since this was written, in December, 1946. [The Editor.]

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Housing Expediter Wyatt immediately announced that all VEHP controls except building materials price ceilings will be kept in force, including limitations on non-residential construction; priorities, allocations and other devices whch channel materials and equipment into veterans' housing; price and rent ceilings on the housing units eligible for assistance under the program; premium payments for increased building materials production; and guaranteed markets and loans for prefabricated housing production. All other controls, orders, regulations and policies put into effect on the initiative of the Housing Expediter will also be retained for the time being. However, it is clear that the end of price control leaves the VEHP as the one major island of government regulation in the midst of a free economy. This fact alone will inevitably require some program modifications.

Although the VEHP will continue, its magnitude and its character will remain uncertain until fundamental decisions are reached with respect to the relative urgency of housing construction and alternative uses for critical materials such as pig iron, steel and lumber. Public and Congressional pressures against government controls over price, production and distribution have been so strong that it will be difficult for the NHA to carry out its responsibilities under the Patman Act. This Act gives housing a prior claim on national economic resources. But until this mandate is reaffirmed by Congress, or by the President, the NHA cannot proceed to use its full powers to stimulate housing construction. Apparently reaffirmation of the Patman Act mandate waits on a clear cut expression by the various interests concerned with respect to relative strength of their desire for decontrol on the one hand, or houses for veterans on the other. At the present time the NHA and CPA materials controls under the VEHP are the only major production and distribution controls which the government is trying to maintain. Strong public awareness of the need for housing construction, and an awareness on the part of materials producers and contractors of the benefits they have gained under the program, may produce mass support for maintenance of these relatively slight inconveniences. On the other hand, the fact that decontrol psychology has swept the country may lead to a reversal of Congressional and Administration sentiment on the urgency of veterans housing.

Background

Before VJ-Day the wartime construction controls (WPB Order L-41) were relaxed, not to encourage housing which now has top urgency status, but to permit industrial construction. Six weeks after VJ-Day Washington was overwhelmed with pressure, and L-41 was prematurely revoked. Although available supplies of building materials were low, and although costs and construction time were uncertain, there was a rapid flow of big money into construction. Private construction activity jumped from an annual rate of approximately $3,072 million in September, 1945, to an annual rate of about $4,175 million in December, 1945.

Most of the new private construction was commercial and industrial. Business wanted to spend excess profits quickly lest the Government collect them as taxes.

Many commercial establishments foresaw the prospect of bonanza profits on completion of new construction projects: e.g., redecoration of a night club, addition to a bar, extension of a department store, an addition to a hotel. During the war years a tremendous demand had developed for commercial and industrial facilities because:

(a) Under the strict wartime controls (primarily WPB Order L-41) construction for less essential purposes had not kept pace with normal depreciation.

(b) Pent-up savings and high levels of current income created an unprecedented demand for hotels, entertainment, trade and other facilities.

Many businesses faced an opportunity to expand their share of the flood volume of consumer expenditures and they were ready and anxious to spend money on construction to share increasingly in the golden tide.

As a result, the relatively small flow of building materials was being largely preempted by commercial and industrial construction. The materials which were left over for housing use tended to go into relatively large houses designed and built for individuals with easy money to spend.

Under these circumstances the Government was forced to take direct action in order to protect veterans who faced the uncertain and difficult job of re-introducing themselves and their families into the American culture which had, for better or for worse, conditioned most of them to living under a roof. This task of finding a niche in the world and a house in the niche is enormously complicated for the average veteran by reason of his relative impotence, financially speaking, as a customer of the construction industry. Customers with excess profits or surtax incomes to spend, commercial enterprises with booming markets to tap, business with expansion plans delayed during the war and maintenance funds accumulated over four years ready to spend—these were the customers of the construction industry whose projects moved briskly ahead. Even the housing that was started was clearly beyond the reach of the ex-GI.

Objectives and Characteristics of Government Program

The need of veterans to find houses for themselves and their families assumed crisis proportions in late 1945. In spite of the "business as usual" atmosphere created by revocation of L-41, the government moved belatedly to give housing a chance to catch up. This effort involved reinstatement of more drastic controls than would have been necessary if the initial modifications of war restrictions had been made more slowly and with due recognition of the critical nature of the housing shortage.

The government program to protect the veteran who wants to trade his old fox hole for a new civilian model has the following purposes:

(1) To stimulate housing construction to the greatest extent possible without serious interference with other functions of the economy.

(2) To make the housing which is constructed available for veterans.

(3) To ensure that this housing for veterans is provided at a reasonable cost which veterans can afford to pay.

When the President appointed Wilson Wyatt as Housing Expediter and asked him to formulate a national emergency program to meet the urgent shortage of housing for veterans, he warned that he wanted no "little plans." The program which was developed on the basis of the President's instruction is definitely not a little one. It is based on the premise that construction of homes for veterans has first priority on the productive resources of the American economy, and it calls for the greatest construction effort in the history of the housing industry.

The magnitude of the VEHP is shown by the following figures:

		(000 omitted)		
Non-farm houses started in:	1925	937	(building boom peak)	
	1929	509		
	1933	93		
	1938	336		
	1941	715		
	1945	225		
				(000 omitted)
Non-farm houses scheduled to be started under the VEHP in:	1946	total		1,200
		Conventional	738	
		Conversions	100	
		Re-use	212	
		Prefabricated	100	
		Trailers	50	
	1947	total		1,500
		Conventional	850	
		Conversions	50	
		Prefabricated	600[1]	

The VEHP is primarily a program of assistance to the private home builder. Congress decided against basing a housing program on the kind of low-rent housing for veterans which must be constructed or subsidized by government because private concerns cannot build it at a profit. Consequently, except for re-use of Army barracks and other military installations as temporary housing for veterans, the government is not subsidizing veterans housing but confining its efforts to expediting and facilitating the operations of the private building industry.

These characteristics of the VEHP have been determined by the legislative framework on which it is based. At the end of 1945 when the Housing Expediter was apopinted, he received delegated power from the President under the Second War Powers Act. These powers were broad but they related primarily to the establishment of priorities for production and distribution of materials and equipment.

In addition to normal insurance and loan functions of the FHA, the NHA, through the FPHA, had additional powers under the Lanham Act (1940) and other legislation to construct war housing. Limitations on these powers which confined construction activities to temporary and re-use housing, and limitations on funds,

[1] As of November 15, 1946, it was expected that this figure might be cut in half.

have limited direct housing construction by the Federal Government during 1946 almost entirely to approximately 200,000 "re-use" units which are being dismantled at military installations and re-erected for veterans' use primarily at colleges and universities.

The Patman Act, the rock on which the VEHP has been founded since it became law on May 22, 1946, gives the Housing Expediter sweeping powers, including the authority to issue directives on matters directly or otherwise related to the VEHP to any of the executive agencies of the Federal Government. Apparently only the President himself is relatively immune from receiving directives under the Patman Act. But again these powers are related primarily to the production, distribution, and use of materials and equipment which are required directly or indirectly for housing purposes.

No provision has been made for direct government subsidy, land purchase, construction of public housing, provision of capital or many other measures which have been used successfully in other countries to construct housing at lower rents and sale prices than an unassisted private construction industry has been able to achieve. VEHP is and must remain (in the absence of the Wagner-Ellender-Taft Act or its equivalent) a program of priority and production assistance to the private builder and materials producer.

The major elements of the VEHP have been as follows:

(1) Curtailing commercial and industrial construction by a limitation order, Civilian Production Administration Order VHP-1.

(2) Stabilizing construction costs by wage controls and by maintaining price controls over building materials.

(3) Stimulating output of building materials by ensuring raw materials for their production by granting priority and price assistance to producers, and by giving premium payments for increased output.

(4) Channeling available supplies of building materials by priority ratings, set asides and other devices into housing units designed to sell at or below $10,000 or to rent at $80.00 per month or less. This type of assistance is being granted to all types of housing under the program including conversion of existing buildings into units suitable for housing.

(5) Developing a prefabricated house industry by priority assistance on materials and equipment, guaranteed markets, and financial assistance in the form of RFC loans.

(6) Increasing the availability of rental housing because the average veteran does not have the financial resources to invest in a house, particularly at this time when costs are abnormally high.

Many other elements contribute to rounding out the VEHP, such as:

(1) Technical assistance in developing plans and specifications for houses, and in developing and testing new materials.

(2) Controls over quality of houses constructed under VEHP by FHA inspection during the construction process.
(3) Assistance to contractors and producers of building materials in labor training and recruitment, and arranging loans.
(4) Arrangements for the channeling of government surplus building materials and equipment into both temporary and permanent veterans housing, and to producers of materials.
(5) Limitations on export of building materials.
(6) Increased imports of building materials.
(7) Conservation orders to prevent wasteful or excessive use of the most critical building materials.
(8) Cooperation with the Wage Adjustment Board and the Wage Stabilization Board to secure wage increases necessary for recruiting or maintaining an adequate labor supply for on-site construction or building materials production.
(9) Guaranteed markets for new construction materials.
(10) Cooperation with the Conciliation Service in the settlement of strikes which hinder construction or materials output.
(11) Arrangements with the Office of Defense Transportation for securing freight cars to move building materials.
(12) Provision of funds for the construction of access roads into timber lands to increase lumber output.
(13) Support for the President's program of reducing Federal construction expenditures to a minimum as part of a general economy policy and to reduce demands by the executive agencies for materials, equipment and skilled labor which are necessary in the VEHP.

In carrying out these diverse aspects of his program the Housing Expediter has not attempted to duplicate or overlap the activities and organization of other Federal agencies which are responsible for policies and programs related directly or indirectly to housing. He has relied on the complete and whole-hearted cooperation of a dozen agencies including:

Civilian Production Administration which has operating responsibility for materials production, conservation, priorities and set-asides, and for non-residential private construction.

Office of Price Administration which has been responsible for building materials pricing.

War Assets Administration which is responsible for matters pertaining to surplus materials and equipment.

Reconstruction Finance Corporation which handles the financial arrangements for premium payments, guaranteed markets, and loans to materials producers and prefabricators.

The Housing Expediter has for the most part kept his directive powers over other agencies in his pocket, knowing that the unwilling cooperation of his brother bureaucrats is not a firm foundation for a program of this magnitude.

Many veterans' organizations who know of the instances where Mr. Wyatt has negotiated patiently for many weeks or months with another agency (perhaps to arrange financing for a new prefabricated house, or to bring a critically short material under control to ensure the availability of supplies to meet housing requirements), have criticized him for not flexing his legal muscles more frequently and forcing universal acceptance of his viewpoint with a flurry of knockout directives. It is inevitable that on many occasions the NHA and the CPA should differ over such problems as how much pig iron should be diverted to housing uses from automobiles, farm machinery and other essential products. In addition to being a spearhead of decontrol pressure, the CPA has had the partisan responsibility of representing the claims of industries whose material requirements compete with those of the housing program. It is natural that NHA and OPA should have differed over such problems as how high to raise the price of construction grades of lumber as a production incentive. In this type of situation NHA had responsibility to push for the best interest of the housing program. Whether or not pig iron shortages would have unduly handicapped other essential production, and whether or not diversion of logs away from railroad lumber into high profit construction grades would severely limit freight car production are questions which should not be answered without detailed knowledge of facts and impartial economic perspective which do not and should not exist in the agency responsible for construction of houses.

The Expediter has been thoroughly aware of the partisan nature of his responsibilities and he has been careful wherever possible to work out differences in judgment between himself and other agencies by negotiation. Cases involving irreconcilable disagreement as to the relative importance of housing and some other essential activity have inevitably been referred to higher authority. An agency receiving an unwelcome Housing Expediter directive would, of course, appeal upstairs in any case. Under these circumstances directive power has been important only in two respects:

1. It has served as an indication to all agencies that the Congress and the Administration wish the VEHP to have, within reason, a top priority claim on national economic resources; and
2. The fact that the Expediter has directive powers in his pocket has often helped the head of another agency to appreciate the cogency of the Expediter's arguments.

It is abundantly clear that directive powers in the hands of any one executive agency does not make for amity within the official family. Those few agencies which have been on the receiving end of a Wyatt directive have been conspicuously unenthusiastic about being overruled by a coordinate agency. Congress should not be urged to grant such authority indiscriminately.

Progress

The measures taken by the Government to facilitate construction of veterans' housing (which are described individually in later sections of this article) met with striking success during 1946. It is estimated that about 700,000 housing units will be completed during the year. By the end of October almost 900,000 housing units had been started and it was expected that by the end of December more than 1,000,000 units will have been started in 1946, unless uncertainty over price advances following decontrol leads contractors to defer a substantial proportion of the approximately 75,000 starts scheduled for late November and December. This compares with the original goal of 1,200,000 units to be started in 1946, and a 1925 peak of 937,000 starts.

The reasons why the goal could not be met in full include:

(a) Delay in the passage of the Patman Act. When the Housing Expediter announced a goal of 1.2 million houses for 1946 in February, he expected to have legislative authority and funds available for premium payments and other actions to promote production of building materials during ten months of the year. By the time the Act was approved, near the end of May, only seven months remained.

(b) Strikes in the steel industry during February and in the coal industry during April and May cost the nation approximately 15 per cent of the year's output of pig iron and steel. Shortages of pig iron for cast iron soil pipe, bath tubs, radiation and furnaces, and shortages of steel for prefabricated houses, windows, bath tubs and plumbing, nails and other essential items have been partly responsible for persuading builders to postpone new starts.

(c) The high rate of non-residential construction which the Government authorized in order to protect public health and welfare and to ensure continuation of essential economic activities. During the first six months of the program a tremendous volume of construction was approved as essential which would be disapproved under the more uniform and strict standards of essentiality currently in effect.

(d) The high level of construction costs and the threat of an inflationary boom and bust have definitely deterred a great many builders and buyers from investing funds in housing construction. The price control holiday during July discouraged construction significantly.

(e) Certain agencies whose cooperation is essential to the success of the VEHP have differed with the National Housing Agency as to the urgency of the housing program and the mandates of the Patman Act. Consequently, they have not been willing to divert resources from other industries to housing to the extent requested by the Expediter.

For the most part contractors who started housing construction during the early part of the year were not able to meet construction time schedules. The construction cycle for a house, which in normal times is between three and four months, length-

ened out to almost seven months. With contractors unable to secure materials to complete houses expeditiously and economically, by the middle of the summer the rate of new construction starts was falling below the rate required to meet the 1946 goal. This was recognized by the Housing Expediter and in August a series of actions were taken in coperation with the Civilian Production Administration to increase the proportion of building material supplies available for housing. These emergency actions increased the number of materials subject to priorities, and sharply increased set asides of critical materials for housing use (the priority and set aside regulations will be described in a later section of this article). As a result it was possible for contractors to complete a large portion of the houses which were started earlier in the year. This improvement in the ability of contractors to finish houses already started probably prevented a serious decline in new construction activity.

The following table shows estimates of the housing units started and completed between January 1 and October 31, 1946:

	1/1/46-10/31/46 *Starts*	1/1/46-10/31/46 *Completions*
Conventional	550,000	310,000
Conversions	50,000	50,000
Temporary re-use[2]	190,000	70,000
Prefabricated	30,000	30,000
Trailers	35,000	30,000
Local Emergency Housing[3]	30,000	10,000
Total	885,000	500,000

DESCRIPTION OF THE MAJOR ELEMENTS IN THE VEHP

1. *Civilian Production Administration Order VHP-1.*

On March 26, 1946, the Civilian Production Administration issued a construction limitation order called Veterans' Housing Program Order No. 1 (VHP-1), in order to reduce the diversion of critical resources, equipment and skilled labor into non-residential construction.

In January, 1946, construction activity was as follows:

		(In millions of dollars)
Total Residential		137
Private	136	
Public	1	
Non-residential		247
Commercial	59	
Industrial	102	
Public	86	
(Including highways, military and naval construction, sewer and water systems, non-residential structures, etc.)		

[2] Temporary construction by federal government for educational institutions and state and local governments, involving re-use of Army, Navy and other federal war-time facilities.

[3] New permanent construction by local governments and educational institutions, involving the re-use of federal facilities, use of surplus materials, and conversion.

The large absorption of building materials by non-residential construction was expected to increase sharply during the year. It was estimated that the best efforts of the construction industry combined with rapid acceleration in output of building materials would bring total volume of new construction activity in the continental United States close to a total of $10 billion for 1946. Of this total VEHP is expected to constitute a minimum of $3.6 billion. After taking account of the anticipated economies in federal, state and local construction programs, it was expected that minimum construction put in place by the government would total about $1.9 billion. Farm construction was expected to be $.4 billion and public utility construction $.8 billion. Consequently, if the VEHP goals were to be met, it was obvious that private non-residential construction must be held to approximately $3.2 billion in 1946. These estimates were rough, but they have proved approximately correct.

Between the relaxation of L-41 and the end of March, 1946, private non-residential projects were started which were expected to involve construction valued at approximately $2.1 billion during 1946. This meant that new projects started during the last nine months of the year must be held to a value put in place during 1946 of about $1.2 billion. The output of building materials and the capacity of the construction industry imposed rigid limitations on the total volume of construction which could be undertaken.

VHP-1 provided that after March 26, 1946, no one could start construction of a structure outside the VEHP without prior approval of the Civilian Production Administration. Exemptions were made for maintenance and repair; small projects; reconstruction of damage caused by fire, flood, wind, etc., under certain circumstances; minimum work necessary to prevent more damage to a building or its contents damaged by fire, flood, wind, etc.; and construction by the Army, Navy and Veterans Administration. Construction of utility lines, railroads, highways, and other work not involving the erection of a structure as defined in the Civilian Production Administration order were not subject to control on the grounds that such construction does not interfere with the availability of the kinds of materials, equipment, and labor needed for housing construction.

The administration of VHP-1 is handled jointly by the Civilian Production Administration and the National Housing Agency. Applications to build under VHP-1 are received by construction field offices of the Civilian Production Administration and reviewed by a Civilian Production Administration district construction committee. An NHA observer sitting with the committee can appeal a committee decision to higher authority. Approval of projects valued at over $1 million must be approved by a CPA-NHA Committee in Washington in order to ensure uniformity of approval criteria throughout the country. Provided with war-time experience on construction limitation and processing of applications, the administrators of VPH-1 had the foresight to keep a record of each application on a machine punch card. For the first time, it has become a simple matter to prepare a factual reply to a

Congressman who protests that the Government is discriminating against his constituents.

In view of the urgent need for reducing commercial and industrial construction in order to ensure the availability of resources for housing construction, more or less strict standards of essentiality have been applied to the review of applications under VHP-1. However, it is obvious that some commercial and industrial construction must proceed in the interest of public health and welfare as well as national economic well being so the following criteria were developed as a basis for deciding on applications for permission to build.

Construction can be approved under VHP-1 on grounds that approval:

1. Is necessary to avoid exceedingly severe hardship;
2. Is essential to maintain public, health and safety;
3. Will cause no impact whatsoever on VEHP;
4. Will increase production of critical materials or products listed by CPA;
5. Is essential to increase food production or preservation;
6. Will provide educational facilities needed by veterans;
7. Is essential to protect property and resources;
8. Will provide community facilities necessary for new residential areas developed under VEHP.

During the first weeks of operations under VEHP-1 a relatively large volume of approvals was necessary on grounds of hardship. Many contractors had invested large sums of money, and procured materials for construction which was just about to start when VHP-1 was issued. In many cases considerations of equity and financial hardship persuaded CPA to approve relatively non-essential projects. During April and May authorizations under VHP-1 averaged $145 million a week. On May 31 stricter standards of essentiality were adopted, and a ceiling was placed on authorizations which reduced the average to about $49 million weekly. The gains from this reduction in non-residential construction could not be realized immediately because of time lags in starting projects and because many of the authorized projects scheduled to start in 1946 are not scheduled for completion until 1947 and later.

Estimates made in August indicated that put in place activity during 1946 on all projects approved under VHP-1 between April and August was expected to exceed a billion dollars. It was obvious that the high rate of private non-residential construction was making it impossible for the VEHP to reach its goal. The supply of building materials and the capacity of the building industry simply was not adequate to sustain this volume of non-residential construction and at the same time build an adequate number of houses for veterans. Consequently, at the end of August a drastic cut was made in authorizations under VHP-1. The rate of approval was slashed from $49 million a week to approximately $35 million. During September actual authorizations fell 15 to 20 per cent below the target level of $35 million a week. For the first time all non-essential construction was disapproved; some rather

essential projects undoubtedly were thrown out with the rest. Although the effect on demands of the construction industry for building materials could not be realized immediately, it is expected that the impact of this reduction will be effective before the end of 1946.

In September residential construction outstripped commercial, industrial, and governmental non-residential building construction for the first time since 1941. Home construction during the month reached an annual rate of $4.6 billion as compared with $4.4 billion for non-residential structures. This fundamental change in the relationship of housing to non-housing construction is due as much to the effects of VHP-1 as it was to the rapidly increasing activity of the housing contractors. Although the tremendous volume of commercial and industrial construction started prior to VHP-1 carried the gross amount of construction activities in this category up month by month until August, and although the effects of the order did not produce an absolute decline in non-residential construction until six months after it was imposed, VHP-1 obviously prevented an acceleration of commercial and industrial activities which would have made the VEHP impossible.

2. *Stabilization.*

One of the major objectives of the VEHP is to ensure that the houses which are built are available for sale or rent to veterans at prices which they can afford to pay. The effort to keep the cost of housing down has had three major aspects:

(a) Price controls over building materials—administered by OPA.
(b) Direct wage controls for on-site construction labor—administered by the Wage Adjustment Board.
(c) Limiting the sale price or monthly rental of housing which can be built under the program to $10,000 and $80 per month respectively—administered by the NHA.

After the President's decontrol decision on November 9, only the last remained. From now on major reliance must be placed on increasing supply to the point where supply-demand relationships compel a break in material and construction costs. An unplanned falling off in housing starts may, to his great regret, assist the Housing Expediter in bringing supply and demand into balance.

In a sense price decontrol has simplified the Expediter's problems at the same time that it largely wrecks the stabilization aspects of his program and threaten to reduce construction starts.

In applying stabilization controls the Housing Expediter has been faced with a critical problem which decontrol has largely lifted out of his hands—the problem of reconciling two apparently contradictory courses of action. It would seem that any increase in the price of building material, wages, or in contractors' profits, would tend to boost the cost of housing. Yet one of the major factors tending to drive construction costs up is delay during the construction process—delay in procurement of materials primarily, and also delay in securing equipment. Inefficient labor and

contractor management also drives costs up. In order to push total cost down it is necessary to pay what it costs to get an adequate supply of building materials, to recruit efficient labor, and secure adequate contracting organizations in the field of housing construction. The problem has been to find the proverbial and illusive happy medium—the point where the additional cost of increased efficiency results in a minimum total cost of construction at a high enough level of activity to produce 1.2 million starts in 1946. Practically speaking the problem can be stated thus:

(a) What price level has been necessary on each building material to bring out production adequate to sustain the program with enough supplies left over for other essential purposes.

(b) What wage rates have been necessary to attract the requisite quantities of labor.

(c) What are the levels of sales price or rental price on a finished house which will attract contractors and give them a reasonable expectation of making a satisfactory profit.

This approach to the problem is based upon the rough but reasonable assumption that housing construction at the programmed level can proceed most efficiently and economically if, and only if, adequate supplies of building materials, labor, and contracting organizations are secured. However, as things stand, the Expediter can and must wash his hands of these considerations as far as materials pricing and wage rates are concerned. After November 9, 1946, his only way of affecting materials prices and wages is via the back door of increasing supply (and, of course, by reducing demand through a cutback in VEHP—a step he may have to take).

Effects of Price Decontrol. During the week when the President was debating his decontrol decision, the Housing Expediter appeared before a committee of the American Legion and stated that removal of price controls would create great hazards for the VEHP. But there were larger issues at stake than the low cost of building materials. Regardless of the effect on housing construction, the Administration had to choose decontrol. The President said in his statement of November 9 what had been abundantly clear for some weeks: Price controls had broken down. In anticipation of higher prices through the end of price ceilings or otherwise, and in some cases deliberately to force decontrol, many sellers had begun to withhold goods from the controlled market. The inability of the Federal Government to act in the face of decontrol fever was so clear and so noticeable that the fever spread rapidly. Regardless of the other substantive issues, it became obvious that price ceilings no longer had even the passive support of the industries governed by them. The whole structure began to crack.

These factors which forced general decontrol were apparent among some producers of building materials but not to the same marked extent as in other sectors of the economy. Legally, it would have been possible to keep price ceilings over building materials in the face of general decontrol, and administratively it probably

would have been possible to force building materials producers to observe ceiling prices if they had been retained to protect the VEHP. But such a course of action would have had most unfortunate consequences as the President made clear on November 9. He said: "I wish that it were possible to keep effective price controls on building materials in furtherance of the veterans emergency housing program, under which we have seen an unprecedented acceleration both of home building and of the production of building materials. But price control on building alone, with no price control on products competing for the same raw materials, would drive these materials away from housing and defeat the objectives of the program."

If price control had been retained on construction lumber, for example, but not on railroad lumber and boxing and crating, all the king's horses and all the king's men could not have compelled the production of enough construction lumber. With price controls on housing type castings such as furnace parts, pig iron would have been diverted into such items as refrigerator and transportation castings and other decontrolled foundry products.

It is far too early to determine the effects of decontrol on building materials prices. However, the best available information on supply, demand and historical price policies in the materials industries point toward the following rough hypotheses:

1. Supply is catching up with demand for a few building materials such as: brick, structural clay tile, building blocks, and common grades of lumber. Although prices on such items may rise somewhat where there are local shortage situations, it is probable that competition among producers will hold prices generally stable and perhaps force a decline within a few months. Already in some areas an increase in producers inventories indicates the imminent end of the current sellers market.
2. Price leadership in some building materials industries is perhaps stronger than federal price controls. Although the price of gypsum board and lath, plywood and other building boards may go up due to increases in cost, the strong historical trend toward price administration within these industries themselves will probably prevent a runaway inflation.
3. There may be sharp and sustained price increases for many critical building materials where current demand considerably exceeds supply: e.g., cast iron soil pipe; hardwood flooring; millwork, including doors; the better grades of lumber; exterior paint; some plumbing supplies; etc.

Sharp increases in building materials prices will have a serious effect on several hundred thousand housing units which are currently under construction. A contractor who is trying to finish a job which is already under way is in no position to be coy and go on a buyer's strike against higher materials prices. It is the vigorous demand for materials to finish partially completed projects which will have the most dangerous but shortrun effect on prices, and the increase in prices will have a sharp effect on the cost of construction. It is possible that the sale and rental ceilings will

be broken on much of the housing construction which was underway at the time of decontrol. Financing arrangements on these units, and saleability, may be seriously affected in many cases.

Price increases following the elimination of price ceilings can be expected to slow down the rate of new housing starts. With a reasonable prospect of lower materials costs and more certain delivery after the initial effects of decontrol have worn off, many contractors who had planned to start a housing job in the near future will sit tight to see what happens because there are distinct signs of buyer resistance to high priced housing and because the market may break before a house started now could be completed. Not only are veterans showing an increasing reluctance to buy or build at what may be the peak of construction costs, but realtors in many cities are reporting signs of softening in the market for existing houses. If the only way prices can go from here is down, no builder wants to put his money into real property or building materials at the top of the roller coaster.

The effects of decontrol may not be wholly bad. There are some materials in short supply, such as softwood flooring, where producers have claimed that the only barrier to increased production has been price. With the end of price control the producers will certainly do their utmost to prove the truth of their earlier contentions by producing flooring at record levels. In so far as there is an increased availability of flooring, or any material where price factors have discouraged production or encouraged withholding, and in so far as price increases on building materials attract producers of other products to produce housing items, there will be an increased supply of materials for housing. Although these factors are not expected to be important, there may be small increases in supply which will make it possible for some contractors to reduce final costs by securing continuity in the construction process.

Remaining Stabilization Controls. The major controls over the cost of housing which remain in the Expediter's hands are indirect. He can depress costs somewhat by increasing the supply of materials and labor. He can decrease demand by cutting non-residential construction still further (a theoretical possibility only), or by reducing the magnitude of the VEHP. However, one more or less direct control remains. It is direct in the sense that it puts a ceiling on the sales price or rent level of housing units constructed under VEHP. It is indirect in that it does not lower construction costs. This control is the $10,000 and $80 per month limits on sales price or rental level respectively. A house designed to sell or rent above these ceilings cannot qualify under the program, and of course it cannot be built outside the program except in the unlikely event that approval is secured under VHP-1.

As a matter of public policy the pricing controls on new housing operate before the construction start is made rather than after completion. No contractor would build if the price for which he could sell the finished house were to be established by a government agency after completion. When a contractor applies for permission to construct a house, he submits his plans to the FHA. A house designed to sell at

more than $10,000, including the cost of land and contractor fees, or to rent at over $80 per month, cannot be approved.

In so far as building costs go up far enough following decontrol so that the FHA recognizes the fact, enforcement of this rule will force a downgrading of the quality of the highest cost houses which can qualify under the program. An upward movement of costs may carry many housing units which are already under construction over the ceilings, but such cases will be beyond FHA control.

Likewise, the ceilings will not restrain an upward movement in the average price or rental of new houses to be started under VEHP. As costs go up the house which could have been built for $6,500 in early 1946 may cost $7,500 or more in early 1947.

The NHA has required the FHA to hold back on high cost units in screening and approving HH applications so that the bulk of the program would be at or below a sales price of $6,500 or an equivalent rental. During the summer when applications for assistance fell below the rate of approvals required to reach the programmed goals, this effort became completely ineffective.

The Expediter continues to offer technical assistance to contractors in preparing plans for housing units which can be constructed at a minimum cost. Although housing quality may be increased in this way, no significant reduction in construction cost can be expected to result from this aspect of the program.

3. *Building Materials Production.*

During the first ten months of 1946 there has been a dramatic increase in the output of building materials. The Department of Commerce index of building materials production, including 16 major materials, shows that output in August, 1946, was 89 per cent higher than December, 1945, and about 60 per cent above the monthly average for 1939. Average daily output in September continued the same strong upward trend, although for some materials total output for the month was down because there were 10 per cent fewer working days than in August. Preliminary figures for October indicated that new post-war production records were attained for most materials.

Increases for many individual materials were spectacular. In the first ten months of 1946 output of wire nails and staples increased 180 per cent, from 25,000 tons in January to over 70,000 tons in October; sink production in October was 97 per cent above January; hardwood flooring, cast iron soil pipe, cement, and bath tubs showed gains of between 70 and 80 per cent from January to October; like increases occurred in the production of common and face brick, cast iron radiation and warm air furnaces between January and September; structural clay tile and convectors increased 65 and 50 per cent, respectively, from January to September; five materials—gypsum board and lath, lavatories, clay sewer pipe, softwood plywood and water closet bowls—rose 30 to 50 per cent from January to October; and only 2 major building materials, asphalt roofing and other building boards, rose less than 20 per cent due largely to strikes in the plants of large producers.

In spite of the high levels of building materials output, the materials requirements of the VEHP during 1946 will not be met. Even though actual housing starts will fall more than 15 per cent below the program, material supplies will not be sufficient for speedy completion of housing units under way. Accumulated deficits of supply carried over from the early months of the year are creating local shortages of such materials as brick, even though the current rate of production has possibly reached the current level of requirements for houses and non-residential projects which have been and are being started. For other materials such as millwork and cast iron soil pipe, the gap between 1946 requirements and supply is estimated to be as high as 30 per cent of requirements.

During 1947 the rate of production of most building materials will reach or exceed the estimated level of 1947 requirements based on the assumption that controls over non-residential construction continue. However, accumulated deficits carried over from 1946, and which must be filled if construction now under way is to be completed, may extend the duration of the expected shortages. Certain other building materials, such as hardwood flooring, are expected to be critically short throughout 1947.

These speculations about supply and requirements relationships are based on the assumption that any falling off in housing construction following decontrol will be temporary. If the costs of building materials go up sufficiently so that a large number of contractors postpone housing construction, demand will come into balance with supply as soon as a substantial number of the housing units which are now under way are completed.

The major techniques which have been used to stimulate increased output of building materials are as follows:

(a) *Price Increases.*

One of the major means adopted by the National Housing Agency to stimulate increased output of building materials during the first months of the VEHP was to secure increases in the ceiling prices of building materials where it was found that ceilings were inadequate to induce producers to increase output. During the first nine months of 1946 approximately 200 price increases for building materials were authorized by the Office of Price Administration. Most of these actions were taken after negotiation with the National Housing Agency or on the initiative of the National Housing Agency or the Civilian Production Administration. The use of price as a means of stimulating increases in the output of materials began shortly after VJ-Day when the Civilian Production Administration, the Office of Price Administration and other government agencies met to take joint action to stimulate output of building materials.

The index of building materials prices prepared by the Bureau of Labor Statistics shows a movement from 129.5 in August, 1944, to 131.5 in August, 1945. The same index shows a marked increase during the fall of 1945 and rapid advances during the first eight months of 1946, reaching 148.2 in August, 1946. The average prices of building materials between 1935 and 1939 equals 100 on this index.

The advance of the building materials price index is not due solely to the use of price by the National Housing Agency and the Office of Price Administration as an incentive for increasing building materials output. A significant proportion of the price increases in building materials were required by the normal pricing standards of the OPA in order to meet increased costs of production due to higher wage rates and increased costs of basic materials. However, regardless of the basis on which they were authorized, the bulk of the price increases on building materials during the last months of 1945 and the first quarters of 1946 had the effect of increasing building materials output or preventing declines that otherwise would have occurred. For example, price increases on construction grades of plywood were granted in order to make it profitable for plywood producers to discontinue output of non-construction grades, convert their machinery and use their peeler logs for the types of plywood urgently required in housing construction. Producers of cast iron soil pipe were granted sizable price increases in order to permit payment of higher wages required to attract labor into unpleasant foundry occupations. Producers of certain types of lumber were given price increases in order to cover the additional costs of equipment, labor, road construction and transportation required to cut logs from relatively inaccessible timber stands.

(b) *Priority Assistance.*

A second major means of stimulating materials output which was used during the last months of 1945 and which is used extensively under VEHP is priority assistance to building materials producers for the procurement of capital equipment and raw materials.

The Civilian Production Administration has placed many building materials on its critical list, making producers eligible for various types of special assistance. For example, producers of such building materials as brick, hardware, cast iron soil pipe, clay sewer pipe, and over a dozen other materials, have been granted permission to apply to the Civilian Production Administration for priority ratings to facilitate procurement of equipment necessary for the expansion of output. Expansion of capacity under this rating assistance program has contributed significantly to boosting output of materials this year.

One of the most important CPA priorities programs during 1946 has been the preference granted to producers of critical housing products for the procurement of steel and pig iron. Effective June 12, 1946, CPA issued Direction 12 to M-21 which provided for certification and preferential treatment by mills and warehouses of orders for steel needed for housing items, such as bath tubs, lavatories, convector radiation, and steel registers and grilles. Assistance was also granted to producers of certain items of farm equipment needed to harvest this year's crop, and brake shoes for railroad rolling stock. Manufacturers of these critical items could certify orders which they had placed on a steel mill after January 1, 1946, on which delivery was promised prior to October 1, 1946. Manufacturers of these items were also allowed to certify their own orders on warehouses. If the receipts of steel resulting

from these certifications were not adequate, the manufacturers could apply to CPA for special assistance. Steel mills and warehouses were directed to honor certifications in preference to all other orders for the same steel product classifications except orders rated AAA or those placed by special directive from CPA.

In the fourth quarter of 1946 the manufacture of some items needed for housing still had to be expanded. The CPA issued Direction 18 to PR-28 to replace Direction 12 to M-21 in the fourth quarter. Under this direction, assistance in obtaining steel is limited to a select group of thirteen critical housing items. Such assistance is given through the assignment of ratings by CPA to orders for steel which will be used in making these housing items. Direction 18 to PR-28 will probably be extended into the first quarter of 1947 and four new groups of housing items, including steel door frames, window sash and frames of certain types and jackets or casings for warm air furnaces and low pressure boilers, have been added to the list of items eligible for assistance. In addition, certain size and color limitations have been placed on a number of items such as bath tubs and lavatories.

The critical shortage of pig iron made it necessary to extend assistance to manufacturers similar to that given users of steel. Late in June, CPA issued Direction 13 to M-21 which channeled pig iron into certain items needed for the housing program, to certain items of farm machinery needed to harvest this year's crops and to brake shoes. Under this direction, CPA issued a certified purchase authority to individual applicants who produce the specified items. The purchase authority covered a definite tonnage of pig iron to be received by the individual applicant during a given month from designated blast furnaces. Assistance for obtaining pig iron was continued under Direction 13 to M-21 in the fourth quarter of 1946, but the list of items covered was somewhat altered and agricultural equipment items were stricken from the list. Iron castings required in the manufacture of certain items for the housing program were placed under Direction 18 to PR-28, just as was steel. However, pig iron required to produce these castings was still covered by Direction 13 to M-21. This program is expected to continue in the first quarter of 1947 because of the urgency of housing requirements for building products made out of pig iron.

(c) *Production Orders and Directives.*

The Civilian Production Administration, in cooperation with the Housing Expediter, has used its authority to issue various types of production orders and directives under the Second War Powers Act to stimulate the production of critical building materials.

The types of action have differed widely from case to case. For example, gypsum board and lath has been a critical building material throughout 1946. At the beginning of the year it became apparent that the major bottleneck which prevented the gypsum board and lath industry from operating at capacity was the shortage of paper liner which is used as exterior facing on gypsum board. Although the larger proportion of the paper liner requirements of the gypsum board industry is met by

captive paper producing plants, it has been necessary during 1946 for the gypsum industry to secure approximately ten or eleven thousand tons of paper liner a month from individual paper producers.

Unfortunately pulp and paper mills have shown great reluctance to produce paper liner. The gypsum board and lath industry is not considered as a potential long-run market for the paper and pulp industry because of the strong tendency toward procurement of paper liner from captive plants. Independent producers of paper liner regard every pound of pulp or pulp diverted from container board and other paper products to paper liner as a serious loss to potential long-run customers and trade relationships with them.

In order to protect the urgent requirement of VEHP the Civilian Production Administration issued shipping directives to the potential producers of paper liner requiring them to ship the necessary quantities to the gypsum board and lath industry. To make the directives generally effective it was ultimately necessary to work out complex arrangements with the pulp and paper industry whereby paper producers who were technologically unable to turn out liner produced some paper for the companies which could use their machinery for liner. This paper was used by the latter companies to meet the requirements of regular customers. In this fashion the impact of paper liner directives was spread with greater equity among all producers in the industry and the concerns capable of turning out liner were not put at a serious competitive disadvantage in relation to the others. On this basis, compliance with CPA directives improved but it was not until the introduction of premium payments that paper liner supplies reached a satisfactory level.

The type of action which can be taken to increase the supply of critical materials depends largely on the structure of the industry concerned. The Civilian Production Administration orders and directives which have been issued to increase the output of critical lumber products indicate how exactly controls must be tailored to fit the pattern of organization of the industry concerned.

Millwork is one of the most critical of the building materials. The present CPA lumber order includes several provisions designed to increase millwork output. For example, millwork manufacturers are given the right to place "certified" orders with sawmills for "shop grade" lumber (high grade knot free lumber from which millwork can best be made) each month up to 11 per cent of their 1940 consumption. "Certified" orders have priority over other orders placed at the sawmill. Sawmills are required to set aside certain types of lumber, including western pine and fir shop grades, for sale only to manufacturers of millwork (and other specified critical products) or their suppliers on certified or rated orders. Without these complex provisions which establish the volume of raw materials which millwork producers may procure, and which direct sawmills to set aside for millwork producers the raw materials which they need, priority assistance would not be practical. Sawmills would refuse to accept priority orders from millwork producers on grounds that orders were inflated beyond real requirements. (To a certain extent this claim

would probably be accurate.) Without uniform set-asides, each sawmill owner would protest that he was receiving an undue proportion of the rated demand and consequently that his regular customers with unrated orders were being discriminated against.

The Civilian Production Administration lumber order also establishes a system whereby manufacturers of hardwood flooring purchase hardwood lumber under a quota system. It is also required that certain types of hardwood lumber be sold exclusively for the manufacture of flooring. This type of preference is necessary in order to prevent diversion of the raw material for flooring to competing products such as furniture.

Production controls over softwood plywood afford another illustration of the variety of production orders and directives which have been issued by the Civilian Production Administration to stimulate the output of critical materials. Producers of softwood plywood are compelled to produce approximately 50 per cent of their monthly output in construction grades. Furthermore, not more than 20 per cent may be of an exterior type.

At the request of the National Housing Agency, the Civilian Production Administration has issued an order designed to increase the output of housing grades of cast iron soil pipe. The order specifies the weights and sizes of pipe which may be produced. Weight specifications prohibit the production of the normal heavy grades of pipe which require large quantities of pig iron. They compel return to light weight victory grades which were used during the war. Size specifications require that approximately 93 per cent of all output of cast iron soil pipe be in the small sizes required by the VEHP. Only 7 per cent of the total output can be in the larger sizes which are used primarily for non-residential purposes.

(d) *Informal Production Orders.*

In many cases the National Housing Agency and the Civilian Production Administration have reached informal agreements with producers of critical building materials, and producers of basic materials needed for housing items, concerning increases in output or increases in shipments for housing purposes. A notable illustration of this type of action is construction nails. Shortages of nails have been one of the most serious obstacles to housing construction in many areas of the country. In May, 1946, agreement was reached between the National Housing Agency, the Civilian Production Administration, the Office of Price Administration and nail producers whereby the producers agreed to accept monthly production goals established by the Civilian Production Administration, and the Office of Price Administration agreed to increase the price of nails as an incentive to divert wire from alternative products such as fencing which were more profitable under existing price ceilings. This agreement was carried out on the government side and has been partly implemented by nail producers even though no formal order or regulation has required them to carry out their side of the bargain.

(e) *Assistance in Labor Recruitment.*

As a result of agreement between the National Housing Agency, Civilian Production Administration and the Department of Labor, special efforts have been made by the U. S. Employment Service to recruit labor for industries which produce materials and products which are certified as critical by the Civilian Production Administration. Special labor recruitment programs have also been conducted to secure adequate quantities of on-site construction labor.

(f) *Premium Payments.*

Section 11 of the Veterans' Emergency Housing Act of 1946 created premium payments as a tool for increasing production of building materials without generally increasing prices. Basically premium payments are a device for evoking marginal production without incurring a general price increase to cover the high incremental costs of marginal production. They are used to give a producer a financial incentive to incur the costs involved in boosting his output above the maximum rate which he would otherwise achieve.

For this purpose Section 11 authorizes a maximum of $400,000,000 to be spent in premium payments by the Housing Expediter subject to the following statutory standards which government lawyers have been puzzling about ever since the Act was passed:

(i) That such payments be of a temporary nature,

(ii) That wherever feasible, the premium payments should be at a uniform rate within an industry,

(iii) That where such payments are applied to a new material, that material should be tested for sound quality,

(iv) That emphasis be placed on avoiding economic dislocations or adverse effects upon established business,

(v) That in the case of new producers (except of new type materials) premium payments should not exceed 50 per cent of the total value of the product,

(vi) That the aggregate value of units to which premium payments are applied should not exceed 30 per cent of the value product of all building materials, and

(vii) That the average rate of premium payments shall not exceed 25 per cent of the value of the units of production to which applied.

When a premium payment plan is instituted for a building material, each producer who wishes to participate can calculate and report his "quota" production on the basis specified in the plan. This "quota" represents, for purposes of the plan, the level of output which the producer could or would attain without premium payment assistance. On any output in excess of the quota, or a stated percentage of the quota, the producer receives a premium payment at the rate specified in the plan. Generally speaking "quotas" have been set at levels which will insure that

producers will receive a significant volume of payments to cover the relatively high costs of increasing output even slightly above the highest levels attained in the earlier months of 1946.

Between the first of June and the first of November, premium payment plans were inaugurated for eleven building materials: Structural clay, softwood plywood, merchant gypsum liner, standing timber, convectors, Northern hardwood flooring, cast iron soil pipe, pig iron, sand lime brick, and nails. During the month of November, plans for many additional materials were in various stages of development.

In developing each of these, two considerations were dominant: first, administrative simplicity; and second, ensuring that premium payments should hit directly at the major bottleneck in a particular industry.

Because of the first consideration, quotas have been established on an "historical" basis—as a percentage of production in some specific period or periods rather than on a basis of plant capacity which is difficult to determine accurately; quotas and payment claims are worked out by the producer himself and certified as true by him; and payments are made at uniform rates rather than progressive rates, which increase with the percentage by which output exceeds the quota, or differential rates which give preference to producers already operating at a high rate when the plan is introduced.

Because of the second consideration, the formulation of plans has frequently been difficult, and some provisions seem extremely complex. For example, investigation showed that the main bottleneck to increased plywood production was a relative shortage of peeler logs. The structure and practices of the lumber industry make impossible a direct premium to loggers for increased production of peeler logs. Accordingly, plywood plants, which boosted output 25 per cent above quota were granted a premium of $7.50 per thousand feet of logs for all peeler logs bought and consumed by those plants. This, of course, has had the direct effect of putting plywood plants in a preferential position in the peeler log market; and, indirectly, it has stimulated a general increase in the production of peeler logs. The best measure of the plan's success is the change in inventories of peeler logs at plywood plants. During the first five months of 1946, the average monthly inventory of peeler logs was 70,415 thousand feet, log scale. In June, the first month of the premium payment plan, peeler logs inventories jumped to 93,043 thousand feet. This rate of increase has been sustained throughout the succeeding months. At the end of September, peeler log inventories were at a new all time high of 174,796. October production of softwood plywood rose to 137 million square feet from 121 million in June.

Similarly the Southern hardwood flooring plan was to a large extent directed at giving hardwood flooring plants the financial means to secure a preferential buying position in the market for hardwood flooring. Within three months after the plan was introduced, production had increased by about 70 per cent.

The gypsum liner and merchant pig iron plans were aimed at subsidizing indus-

tries which supply basic materials to building material producers. In the case of gypsum board and lath, the major obstacle to increased production has been an acute shortage of paper liner. Since paper liner was to a large extent provided to the gypsum industry by merchant paper producers, the plan pays premiums directly to producers of liner for increased production and shipment of liner to gypsum board and lath manufacturers. Under this plan the gypsum industry received additional shipments of liner paper and reached new production records. Liner shipments from non-integrated producers increased from 7,397 tons in May, the month prior to the introduction of the plan, to 10,166 tons in September.

Likewise, a prime bottleneck to increased production of many building items such as cast iron soil pipe and bathtubs was the over-all national shortage of foundry and malleable grades of pig iron. Accordingly, substantial premiums are being paid to merchant pig iron producers for all pig iron production in excess of quota. During July and August monthly production of foundry and malleable grades of pig iron averaged about 470,000 net tons. The plan was introduced in September, and October production jumped to 511,000 net tons. This sizable increase is due primarily to the reopening of several closed furnaces. Further large increases in output are expected as more closed furnaces are brought back into blast under the stimulus of premium payments.

In the cast iron soil pipe industry the main obstacle to increased production was the extra expense involved in working more than five days a week. Accordingly, the premium payment plan was geared to provide the financial wherewithal to defray the additional costs of sixth day production. During the first seven months of 1946 the average monthly production of cast iron soil pipe was about 28,000 short tons. During August, the first month of operation under the premium payment plan, production went up to 35,796 short tons; in September, production further increased to 38,542; and in October, production reached the very satisfying level of 47,000. This increased output was partially due to allocation of pig iron to cast iron soil pipe producers. However, it is clear that even with adequate supplies of pig iron, current production levels could not have been reached without six days a week operations in soil pipe plants.

It is difficult to determine whether an industry subsidized with premium payments actually achieved greater production levels—and more quickly—than if no payments had been made; however, the increases in output of most materials following introduction of premium payment plans have been rapid, and it is clear that the premium payments have been a major factor in achieving this result.

(g) *Many other types of action have been taken to increase output of materials such as:*

(i) Assistance in settlement of strikes.
(ii) Assistance in importation of raw materials.
(iii) Construction of access roads into timberlands with funds secured for this purpose by NHA.

(iv) Provision of technical facilities to the State of Washington to increase the availability of lumber from state-owned land.

Prospective Developments. There is no reason to expect that abandonment of price ceilings over building materials will have any effect whatsoever on the non-price measures which have been taken to increase output. The extent to which price increases will be used as a device for increasing output is now the responsibility of the individual producers rather than the Office of Price Administration. Priorities assistance and other types of action by the CPA can continue under the Second War Powers Act until March 31, 1947. It is expected that some types of CPA assistance to building materials producers will be abandoned prior to that time because the liquidation of the Civilian Production Administration may start before the expiration of its legal powers. However, it may be necessary to continue some types of special assistance, in addition to premium payments, to materials producers after March 31, 1947. If this appears necessary it is expected that the President will ask for a limited extension of the Second War Powers Act to provide the necessary authority.

4. *Materials Channeling.*

The general objective of the materials channeling system under the VEHP is to insure that the veterans housing gets first claim on the available supply of materials and products. It is impossible for VHP-1 and reduction in federal construction to cut total demands for building materials down exactly to available supply. Even if over-all requirements for building materials were brought into rough balance with supply, there would still be shortages of individual materials in particular localities. Consequently, the present system of HH priorities and set-asides will be necessary even when total building materials supplies are approximately equal to total demand in order to insure that housing contractors receive materials rapidly in preference to other users. Otherwise, continuity of construction would be interrupted by sporadic shortages of some items, and the low costs associated with efficiency could not be secured in the construction of veterans housing.

The following techniques are used to direct the flow of building materials into housing in preference to other types of construction:

(a) HH Priorities. A contractor may purchase materials for the construction of a housing project approved under VEHP using an HH priority rating which gives his orders preferred status in relation to non-rated orders. Under the terms of Priorities Regulation 33, a supplier of building materials must sell to a customer whose order is accompanied by an HH rating in preference to customers with unrated orders. The HH ratings have the same legal status as the priorities which were issued for war production purposes and other priority ratings which are currently issued to protect certain military and other essential programs. However, AAA ratings issued only in special emergencies, and MM ratings issued for limited procurement of supplies by the military agencies, take precedence over HH ratings.

HH ratings may be used to purchase 66 materials listed on Priorities Regulation 33 for use in housing projects approved under VEHP. These materials include practically all those which have imposed serious limitations on housing construction.

HH ratings differ in one important respect from the preference ratings which were used during the war and from the AAA and MM preference ratings which are still used by military agencies for essential procurement. Generally speaking, HH ratings can be served only on the distributor of building materials. They cannot be extended back from the distributor to the producer for the replenishment of inventories. However, in some cases the normal distributive practices of the producers are not adequate to provide dealers with the supplies needed to meet HH ratings. Two types of action have been taken to meet this situation. In case of lumber, a CPA order specifies alternative methods by which lumber distributors may place certified orders on sawmills for replenishment of their lumber stocks. In the case of twelve scarce building materials, the Civilian Production Administration has found it necessary to make HH ratings extendable in varying degrees. HH ratings have been given a limited extendability for nails, steel pipe and certain fittings, and galvanized steel sheet to enable the dealer who has received an HH rating to use it in buying from his wholesaler. HH ratings have been made extendable back to the manufacturer in the case of brick, structural clay tile and concrete blocks.

(b) Set-asides. In order to make HH ratings effective at the distributor level for particularly critical building materials, the Civilian Production Administration, at the request of the National Housing Agency, requires distributors to set aside a portion of their supply each month to meet HH rated orders. When a building material is in critically short supply there is great pressure on the distributors to meet the needs of their regular customers whether or not these customers are eligible to use an HH rating under the VEHP. If a dealer has no rated orders on his books when he receives a shipment of a scarce item he is legally entitled to do so in the absence of set-asides. Consequently, many building materials dealers decline to accept rated orders for critical materials when they have no stocks on hand so that they will not have rated orders on their books to interfere with "normal" distribution when new stocks are received. In order to compel distributors to accept rated orders, it has been necessary over a period of months to place over 20 especially scarce materials under set-aside regulations. Under the initial set-aside rules, a dealer who received a shipment of critical building materials was required to reserve part of it for a limited period—generally three weeks—to meet HH rated orders. After expiration of the period, he was free to sell on unrated orders. Leakages of set-aside materials to non-housing uses were so serious that the automatic termination of set-asides has been revoked for most reserved materials. Now a dealer is required to hold a fixed percentage of his receipts indefinitely to fill HH and other priority orders. If he does not receive priority orders up to the amount of his set-aside over a period of months, he may appeal to the NHA for release from set-aside rules.

The set-asides range from approximately 60 to 100 per cent. For example, 60

per cent of water heaters must be set aside to meet rated orders. For metal doors and frames set-asides are 75 per cent; on floor and wall furnaces 95 per cent; on prefabricated houses 100 per cent. Other materials under set-asides include bathtubs, certain sizes of copper tubing, cast iron soil pipe, clay sewer pipe, hardwood flooring, millwork, etc.

(c) Other materials-channeling actions which have been taken by the Civilian Production Administration at the request of the National Housing Agency include:

(i) Issuance of regulations to insure that certain types of logs and raw lumber are used in specified amounts for the production of critically short lumber products. For example, a CPA order diverts supplies of certain hardwoods into flooring, and certain grades of the western softwoods into millwork.

(ii) At the request of the National Housing Agency, the Civilian Production Administration has issued a conservation order on cast iron pipe which prohibits its use more than five feet beyond the foundation of a building, except under special circumstances. The objective of this order is to insure that the available supply of cast iron soil pipe is used for essential interior purposes. The order in effect requires that cast iron soil pipe substitutes be used where great durability, resistance to stress, and permanence are not essential.

Consequences of Price Decontrol. The effects of price decontrol on materials channeling are not clear as of November 15 when this article is being written. Channeling rules may be subject to additional strain now that buyers of building materials are legally free to pay exorbitant prices to get materials they are not entitled to receive under priorities and set-aside rules. On the other hand it is clear that such behavior was already widespread prior to November 9. There are many cynics who say that the situation must remain stable or improve because it could get no worse.

Some officials argue that termination of unpopular price controls will improve cooperation with priorities and set-aside regulations and ease enforcement problems. Others believe that the channeling controls have been seriously weakened and must be progressively modified because they are now isolated and under attack from all sides by the same forces which have compelled general price decontrol.

5. *Industrialized Housing.*

The Housing Expediter has launched a major effort to create a new industry in the United States. The theoretical advantages of applying industrialized mass production techniques to housing construction are great because of the expected savings in materials and labor costs, and the potential improvement in quality of construction. For these reasons it is expected that the output of the prefabricated housing industry will exert a stabilizing influence on rocketing construction costs. Furthermore, the construction capacity of the conventional building industry is already taxed. The output of the prefabricated industry is expected to be a significant con-

tribution during 1947 over and above that which can be expected from the conventional housing industry.

During 1946 the Housing Expediter had expected that the prefabricated industry would start approximately 100,000 units. Because of serious delays in developing plans, and procurement of machinery and materials, the number of starts will be considerably less than half this number. However, the Housing Expediter is launching an industrialized housing program for 1947 which is expected to result in the starting of about 300,000 prefabricated houses. As of November 15, the original 1947 goal of 600,000 prefabs appeared definitely out of the question because of materials and facilities shortages.

In addition to frame, plywood, and stressed skin prefabricated construction, the Expediter hopes that a large number of metal prefabricated houses will be built, divided about half and half between steel and aluminum.

The major means available to the Expediter for developing a prefabricated industry is his authority to enter into guaranteed market agreements. Under the terms of the Patman Act, the Expediter may use the powers of the Reconstruction Finance Corporation Act to underwrite guaranteed markets for prefabricated houses provided that at no time the number of prefabricated houses covered by the outstanding underwriting agreements exceeds 200,000. By transferring the risk to the Federal Government, prefabricators are relatively free to proceed with the technical and production aspects of applying industrial techniques to housing construction on a mass production basis. By the end of October, 1946, guaranteed market contracts had already been signed for the production of approximately 30,000 prefabricated houses in 1947.

At the present time the Expediter is assisting several prospective producers of prefabricated houses in negotiating with the War Assets Administration for surplus plants, and with the Reconstruction Finance Corporation for financial assistance to start production.

6. *Rental Houses.*

Veterans have indicated a strong preference for rental housing as opposed to sale houses in several surveys conducted under the auspices of the National Housing Agency. In view of the current price situation, veterans prefer not to invest their limited resources in the purchase of a house at a price which they cannot realize on resale in the future. At a time when the prices of old houses are inflated above pre-war values and when building costs on new houses are far above pre-war levels, a prudent veteran with limited financial resources prefers to rent. Some veterans have protested vigorously that it is worse than ironical for the Government to give veterans a preference in purchasing new houses at prices which are considerably above the probable resale value in 1950.

Under these circumstances, one of the objectives of the VEHP is to secure a large volume of rental construction. During 1946 this effort met with some success

because practically all conversions were designed for rent rather than sale, and all government temporary re-use construction was for rent. However, these two categories totalled only about one quarter of the program. Of new permanent housing started between 20 and 25 per cent was intended for rent. Unfortunately, it is expected that there will be only a small re-use program and few conversions in 1947. If the 1946 ratio of sale to rental housing continues into 1947, approximately 75 per cent of the starts by private construction industry will be for sale.

Strong preference among builders for speculative construction of houses for quick sale as opposed to investment in rental housing is based upon uncertainty with respect to future cost trends. No builder and no investor wishes to put money into a rental house now which can be duplicated at a significantly lower cost in the near future. Investors prefer hard money during inflation because they do not want to invest in real property which will depreciate in value with a break in prices. Under these circumstances, large scale construction of apartments and rental housing developments is not feasible without some form of government assistance which will reduce financial or construction costs by almost the amount of the anticipated reduction in construction costs when prices break at the end of the inflationary period.

7. *Major Policy Problems.*

At the present time the Housing Expediter has a series of major policy problems which may or may not have solutions. They are as follows:

(a) *Falling off in housing starts.* During the latter part of 1946 there was a slow decline in the number of housing starts. It is expected that the number of starts per month immediately following price decontrol may collapse far below the August, September and October level. There was a decline in housing starts during the third quarter of 1946. This was due primarily to shortages of materials which were in part rectified by drastic increases in set-asides and rapidly increasing output under the premium payments plan. There may be a further sharp drop in new housing starts below the normal seasonal decline due primarily to uncertainty with respect to costs. This is a further obstacle to VEHP about which the Expediter can do nothing directly.

The extent to which housing starts will pick up during early 1947 depends upon the extent to which surpluses of building materials force stabilization or decline in prices. Long before prices of building materials decline building materials producers will probably exert enormous pressure toward relaxing VHP-1 in an effort to regenerate industrial and commercial construction demand which would tend to hold building materials prices at inflated levels.

Clearly the 1947 program of 1.5 starts must be reduced. The extent to which it will be slashed is as yet undeterminable.

(b) *Rental houses.* Even before price decontrol veterans were becoming more

reluctant to buy new homes at inflated prices. Large scale rental housing which does not require a veteran to invest in inflated real estate and which is more economical to build than individual detached houses offers a solution to many of the Expediter's dilemmas. Under the terms of existing legislation it may be possible for the Expediter to make limited financial concessions in the form of lower interest rates or long amortization periods which would tend to stimulate rental construction. It might also be possible for him to use his channeling authority as materials become more plentiful to insure the continuity of materials flow to rental projects with consequent savings in construction costs. However, until building materials and labor costs go down significantly, it is probable that only a more substantial assumption of risk by the Government, based on the present RFC powers and new legislation, would induce large scale investors to undertake rental housing developments.

(c) *Political support.* In order to start a record volume of houses next year, it is imperative that channeling of pig iron, steel, lumber and other materials into housing and housing products be continued. This means depriving powerful and local industries of materials which they will do their utmost to secure. It is equally imperative, and equally difficult, to continue restrictions on non-residential construction.

Without the vigorous support of veterans who need houses, and the large number of relatively small industries which benefit from the VEHP, the National Housing Agency cannot stand alone in a hurricane of decontrol and maintain its present distribution orders by means of which housing secures essential supplies of basic materials. Decontrol psychology and industry pressures are too strong. Bureaucrats should not, cannot, and do not wish to try to carry out a program which lacks popular support.

Under these circumstances, it is inevitably up to Congress, or the President (preferably both), to make a decision between housing for veterans and durable goods for those who have money with which to buy. The decision may depend on which alternative the representatives and servants of the people think they hear people clamoring for. Some kinds of people, little people, have to clamor louder than others to be heard.

HOUSING—LEGISLATIVE PROPOSALS

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"The fundamental purpose of Government is to protect the health, safety and general welfare of the public. All its complicated activities have that simple end in view. . . . Whenever there arises, in the State, a condition of affairs holding a substantial menace to the public health, safety or general welfare, it becomes the duty of the Government to apply whatever power is necessary and appropriate to check it."[1] There has been increasing recognition by the Congress that the housing shortage which has been accumulating steadily over the past two decades represents an area of such public concern as to require that various forms of governmental assistance shall be made available to assure the production of good housing in adequate volume and at prices or rents which will meet the needs of all income groups.

Today, in the midst of innumerable shortages resulting from the war, we tend to think of the current emergency shortage of housing as just another war-born shortage. However, unlike other current shortages which must be overcome in the course of conversion from war production to the production of the kinds of goods and services required to meet the needs of a nation again at peace, the current critical housing shortage is not, basically, a temporary or war-born shortage. As was stated in an editorial in Life Magazine, "By now it is clear that the housing shortage is not a temporary or war-born dislocation. . . . Our homeless veterans are merely the most dramatic victims of a shortage whose ultimate victims are the American family and the American standard of living." We cannot get at the roots of the current shortage of housing for veterans unless we place it in the context of the cumulative housing shortage dating back to the beginning of the decline in home building after 1925.

Few industries have shown such wide fluctuations in production from year to year as the housing industry, which has varied from an all-time high of more than 900,000 homes started in 1925 to a low of about 90,000 homes started in 1932. Up to the present time we have never been able to continue a sustained high annual volume of house construction. With few exceptions, we have never built enough housing each year to keep pace with the annual net addition in the number of newly

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[1] New York City Housing Authority v. Muller, 270 N. Y. 333, 1 N. E. (2d) 153 (1936).

formed families. We have never been able to follow a consistent practice of replacing any significant amount of the housing which is no longer satisfactory because most of our past housing production has to be kept in use.

It is true, of course, that after the cessation of hostilities in World War II building materials were in extremely short supply. This shortage was sharply accentuated by an overwhelming demand for all types of building materials, due, in large part, to the normal peacetime demands which necessarily were deferred during the war period. The building materials shortage had to be solved first if we were to get any substantial volume of housing built. The need for rapidly increasing the production of building materials was finally translated into a legislative proposal in the form of the bill (H.R. 4761, 79th Congress) introduced by Congressman Patman of Texas on November 20, 1945, and subsequently enacted as the Veterans' Emergency Housing Act of 1946, on May 22, 1946.[2]

However, so far as the attainment of a sustained high annual volume of residential construction is concerned, the shortage of building materials is not the basic problem. Before the war, when there was no shortage of building materials, we had a low annual volume of house construction and a housing shortage. Basically, our housing difficulties result from the fact that, even under prewar conditions, the housing produced through the normal operations of private enterprise cost too much. This has been clearly recognized by many outstanding members of the Congress. The Honorable Robert A. Taft, senior Senator from Ohio, has stated this problem very clearly:

"Mr. President, the basic difficulty in dealing with the housing problem relates to the cost of housing in relation to the income of the people in the United States. We cannot build new houses in the United States for more than the upper half of the income groups in the population. . . .

"There is a greater lack of new rental housing than there is of housing to buy, because very few people are willing to invest their money in rental housing. It has not been very successful. The fact that they must obtain rents which half the people cannot pay means that they are rather unwilling to invest in new rental housing, particularly at present high costs.

"It is claimed that private enterprise, without any aid from the Government, can solve the problem. I think that is contradicted by the facts and the figures. Private enterprise cannot solve the problem, because it cannot build for half the population. It cannot be done."[3]

On rare occasions this basic difficulty has been recognized by the house building industry itself. The June, 1946, edition of The Bildor, a publication of the Builders' Association of Metropolitan Detroit, stated in an editorial, "There is a limit to the number of houses which can be sold at from $9,000 to $15,000, even in this exuberant housing market; even today the number of families having savings or incomes permitting purchases at these prices are comparatively small compared to the great mass

[2] 60 STAT. —— (1946), 50 U. S. C. A. App. (supp. pamphlet, 1946) §1821.
[3] Cong. Rec., April 11, 1946, at 3580, 3581.

of potential home owners. The $9,000 to $15,000 class represent only the cream on the top of the bottle. Some time that cream will be all skimmed off."

The legislative proposal addressed to this most important phase of the housing problem, both current and long-term, is the General Housing Bill. This bill was introduced on November 14, 1945, under the joint sponsorship of the Honorable Robert F. Wagner, senior Senator from New York, the Honorable Allen J. Ellender, senior Senator from Louisiana, and the Honorable Robert A. Taft, senior Senator from Ohio.

It is unfortunate that, traditionally, legislation which deals with social or economic problems immediately invites attack by a host of groups who categorically regard all such legislation as presumptively unsound and unnecessary. The Wagner-Ellender-Taft General Housing Bill has received perhaps more than its share of comment from groups who have not been constrained to rational consideration of its merits. The President of the National Association of Home Builders characterized as "extremely factual" the following evaluation of the Bill contained in a Washington News Letter of that organization:

"WASHINGTON SIDE SHOW

"HUREE . . . HUREE . . . HUREE! Step right this way folks and see the WONDER BILL OF THE AGE! . . . Don't push—don't shove—there's room for one, there's room for all, there's room for everyone! . . . Step up and see the GREATEST *of all* HOUSING BILLS—it's Democratic—it's Republican—it's *Socialistic!*—it's good for one—it's good for all—and best of all it's FREE! . . . It's a sure-fire—never-miss—positively-guaranteed-to-cure-all, sugar-coated bill . . . ABSOLUTELY GUARANTEED to attract, to charm and to please the young and old alike! . . . IF you're a farmer, here's free housing . . . IF you're a laborer here's ONE HUNDRED PERCENT financing, THREE PERCENT MONEY for FORTY YEARS! Here's yield insurance! . . . Here's EVERYTHING for private enterprise . . . builders, brokers, bankers, building and loans! . . . IT'S WHAT YOU WANT—AND MORE! . . . For city slickers Federal aid! . . . AND BEST OF ALL, for public housers, WE ABSOLUTELY GUARANTEE unlimited Health, wealth and EXPANSION! . . . All of this, good folks, and More To Come! . . . for *good* measure, we throw in a SOLID GOLD PLATED, permanent, all-powerful NHA! . . . *And all of this is free*—it's *Gratis!*—it doesn't cost one silver dollar, two bits, one thin dime, the tenth part of *a Billion,* or one plugged nickel . . . UNCLE SAMMY *pays the Bills!* So, STEP RIGHT UP folks—don't crowd—don't shove—*Big Public Housing Show opens Soon*—come one, come all—step right this way—HUREE, HUREE, HUREE!"[4]

As a matter of fact, there is a long history to the origin of this Bill and its sponsorship was certainly not attained by accident.

On March 1, 1943, Senator Taft introduced for himself, Senator Wagner (Chairman of the Senate Banking and Currency Committee) and Senator Thomas of Utah (then Chairman of the Senate Committee on Education and Labor) S. Res. 112. This Resolution called for the establishment of a special committee to investigate the housing problem and to recommend a comprehensive program of housing action. The special committee was to consist of three members from the Senate Banking and

[4] *Hearings before the Senate Committee on Banking and Currency on S. 1592,* 79th Cong., 1st & 2d Sess. (1945, 1946), Part II, 612.

Currency Committee and three members from the Senate Committee on Education and Labor, the two committees in the Senate which, traditionally, had jurisdiction of housing legislation.[5]

While this Senate resolution was under consideration there was established, under the Chairmanship of the Honorable Walter F. George, senior Senator from Georgia, a Special Senate Committee on Postwar Economic Policy and Planning. When this special committee was set up, Senator Barkley, the majority leader, indicated that he did not desire to have other special committees established to inquire into various segments of postwar economic policy or planning. As a result, while S. Res. 112 was not further considered, its author, Senator Taft, was appointed Chairman of a Subcommittee on Housing and Urban Redevelopment of the Special Committee on Postwar Economic Policy and Planning. In lieu of appointing other members from the special committee, Senator George authorized Senator Taft to invite the Chairman of the Banking and Currency Committee and the Chairman of the Education and Labor Committee each to appoint three members to serve with him, so that there would be a working relationship with the two standing committees of the Senate which had jurisdiction of housing legislation. Senators Wagner (New York), Radcliffe (Maryland), and Ball (Minnesota) were appointed from the Banking and Currency Committee, and when Senator Ball retired from the Banking and Currency Committee in January of 1945, he was succeeded by Senator Buck of Delaware. Senators Chavez (New Mexico), Ellender (Louisiana), and LaFollette (Wisconsin) were appointed from the Committee on Education and Labor.

Hearings were held by this Subcommittee from June, 1944, through February, 1945. Officials of Government agencies concerned with housing and representatives of innumerable national organizations interested in housing testified at these hearings. In addition, extensive studies and investigations were carried out by the Subcommittee and the members of its staff. On August 1, 1945, the Subcommittee filed its Report. The recommendations contained in the Report of the Subcommittee on Housing and Urban Redevelopment were directed to the following major items:

(1) The Congressional establishment of a national housing policy, its objectives, and the means to be employed in their attainment;

(2) The establishment of a permanent form of organization for the housing activities of the Federal Government, including the establishment of a comprehensive program to meet the special problems of improving the character of farm housing;

(3) The determination of methods of assistance by the Federal Government to private enterprise to enable it to serve more of the housing need; and

(4) The delineation of the extent and the manner in which the Federal Government shall aid communities in clearing their slums and in overcoming the inadequacies in their housing for families of very low income.

[5] Under Sections 102 and 121 of the Legislative Reorganization Act of 1946 (Public Law 601, 79th Cong., 2d Sess., approved August 2, 1946) the Committees on Banking and Currency of the House and Senate will have jurisdiction of housing legislation.

In August, 1945, Senators Wagner and Ellender introduced the initial bill (S. 1342) to carry out the recommendations of the Senate Subcommittee. At the time of the introduction of this bill, Senator Taft indicated that, while it carried out some parts of the recommendations of the Senate Subcommittee, he did not feel that it carried out all of them. However, he stated that he would be willing to work directly with Senators Wagner and Ellender during the Congressional recess in order that together they might develop a comprehensive bill to deal with the housing situation more closely along the lines of the recommendations of the Senate Subcommittee. During the 1945 Congressional recess these Senators redrafted and perfected the initial bill. Necessarily, this meant a reconciliation of methods and details in sincere and constructive effort to attain the desired objective.

It is interesting to note that there have been few, if any, legislative proposals introduced in the Congress to which there has been devoted such continuous and painstaking consideration of even the most detailed provisions. As a matter of fact, this led Senator Wagner, who has served more than 20 years in the Senate, to say at the time of its introduction, "I can honestly say that almost no legislation within my memory has received such careful and continuous study, prior to its introduction, by a group of Senators who may be called fairly representative."

From November 27, 1945, until January 27, 1946, the Senate Banking and Currency Committee held full hearings on the bill. Following the hearings the Committee held extensive executive sessions during which they considered the bill line by line. The bill was unanimously reported by the Banking and Currency Committee to the Senate on April 8, debated, and passed by the Senate without a dissenting vote. The House Committee on Banking and Currency did not complete its hearings on the bill prior to adjournment sine die on August 2, 1946.

Quite apart from the provisions of its several titles, the Wagner-Ellender-Taft Bill would make an extremely important contribution to housing legislation in terms of a clear declaration by the Congress of a national housing objective and policy. Over the past decade and a half, the Congress has established various housing agencies to deal with particular phases of the housing problem. Quite generally, these agencies were created to deal with a specific segment of the housing problem which was currently pressing for solution. These facts were adverted to in the report of the Senate Subcommittee where it is stated:

"Thus, in order that private home mortgage institutions might more effectively meet the needs for home mortgage credit, the Home Loan Bank System was established. In the face of a general collapse of the mortgage credit structure, the Home Owner's Loan Corporation was established. In order to extend the field of mortgage credit and establish a new system of mortgage insurance, advocates of private housing secured the adoption of the National Housing Act, creating the Federal Housing Administration. In order to provide activity in the construction industry and to assist city dwellers of low income, the Public Works Administration, after experimentation with loans to private limited dividend companies, undertook the construction of public housing. Later, the interest in public housing led to the passage of the law setting up the United States Housing Author-

ity. In each case, the need of the particular step was evident, but relation of each step to the whole was not clearly developed."

Prior to the Wagner-Ellender-Taft Bill the Congress never had the opportunity to evaluate the varied housing functions of the Government as a complete picture; it never had the opportunity to establish a national housing objective and the specific policies to be followed in attaining that objective. In this area, therefore, the Wagner-Ellender-Taft Bill makes a most significant contribution to housing legislation. It declares the national housing objective to be the "production of residential construction and related community development sufficient to remedy the serious cumulative housing shortage, to eliminate slums and blighted areas, to realize as soon as feasible the goal of a decent home and a suitable living environment for every American family." It then declares the specific policies to be followed in the attainment of this objective to be:

(1) Private enterprise shall be encouraged to serve as large a part of the total need as it can;

(2) Governmental assistance shall be utilized where feasible to enable private enterprise to serve more of the total need;

(3) Governmental aid to clear slums and provide adequate housing for groups with incomes so low that they cannot otherwise be served shall be extended only to those localities which estimate their own needs and demonstrate that these needs cannot fully be met through reliance solely upon private enterprise and without such aid; and

(4) The main housing functions of the Government shall be consolidated into a single national housing agency in order to achieve unified and coordinated activity in the execution of the declared policies.

Viewed in the light of these declared policies the Wagner-Ellender-Taft Bill has a clarity of thought and continuity of purpose seldom found in such comprehensive legislation. It is declared, first, that private enterprise shall be encouraged to serve as large a part of the total need as it can. Title II provides aids for technical research and market analysis "to enable private enterprise and localities to meet more of the need for housing and related community developments through their own efforts." Title III, through various amendments, perfects and increases the existing Government aids extended to privately financed housing through Federal Savings and Loan Association operations, Federal Home Loan Bank operations, Federal Savings and Loan Insurance Corporation operations, and Federal Housing Administration operations.

In pursuance of the second policy to be followed in the attainment of the declared national housing objective, Titles IV, V, and VI provide additional Government assistance to enable private enterprise to serve more of the total need. Title IV supplements the existing systems of mortgage insurance under the National Housing Act with special systems of mortgage insurance for families of lower income who require more favorable terms than those existing systems offer. This Title contains

the plan for making available 95 per centum FHA insured 32-year mortgage loans, with interest at not more than 4 per centum per annum, for moderately priced homes. It also contains the provisions which would make available 95 per centum FHA insured 40-year mortgage loans, with interest at not to exceed 3½ per centum per annum, for housing projects undertaken by cooperatives, non-profit mutual ownership housing corporations, and educational institutions, if, in the latter case, they are undertaken primarily for the purpose of providing adequate housing accommodations for student veterans.

Title V contains the so-called "yield insurance plan" which, in essence, is an extension of the tested FHA mortgage insurance system applied to direct investments in rental housing for families of moderate income. While the plans contained in Titles IV and V are combined with incentives to cost reductions, the financial device alone would make possible important reductions in the monthly costs of rental housing. For example, it has been conservatively estimated that the yield insurance plan would make possible reductions of up to 20 per centum in the monthly rental charges. Thus, a rental apartment which, under the customary method of financing, could be rented at $50 a month might be rented at about $40 per month when financed under the yield insurance plan.

Title VI is also designed to assist private enterprise to serve more of the total need by extending aid to localities for the acquisition of land in slums and blighted areas for clearance and preparation for redevelopment in accordance with the most appropriate re-use of the land as determined by the governing body of the locality. This Title is designed to make it possible for private enterprise to participate extensively in the redevelopment of slums and blighted areas.

Title VII would provide for the perfection and resumption of the program of aid to the localities for low-rent public housing for families with incomes so low that they cannot otherwise be served. Up to 125,000 units of public low-rent housing a year for 4 years is authorized by the bill—a total of 500,000 units over the 4-year period. Consistent with the declaration of the policies to be followed, this Title requires that no aid for any such public low-rent housing shall be extended to any community unless (1) it submits an analysis of its local housing market demonstrating that there is a need for such low-rent housing which cannot be met by private enterprise; (2) it demonstrates that a gap of at least 20 per centum has been left between the upper rental limits for admission to the proposed public housing and the lowest rents at which private enterprise is providing—through new construction and existing housing—a substantial supply of good housing; and (3) the governing body of the locality approves the provision of such low-rent housing.

Title VIII provides a comprehensive program of rural housing through farm housing assistance by the Secretary of Agriculture and an extension of the urban low-rent housing program so that similar assistance will be available for low-rent housing for farm families of low income.

Title IX provides for the disposition of permanent war housing with preference

to veterans; Title X provides for a periodic inventory of housing needs and programs to be made to the Congress so that it may evaluate the progress being made toward the attainment of the declared national housing objective and the adherence to the policies which the Congress required to be followed in attaining that objective; and Title I consolidates the main urban housing functions of the Government into a single national housing agency.

Some criticism has been leveled at the Wagner-Ellender-Taft Bill on the ground that it would be inflationary because it would liberalize credit in a period when there is ample credit available. However, such criticism completely loses sight of the main objective of the Bill which is to make it possible for private housing enterprise to build and market housing for the largest segment of the housing market—the families of moderate income who, without the aids provided by the Bill, cannot afford to buy or rent new housing. The object of these financing plans is not to make home financing easier through liberalization of credit terms, but to make it cheaper because cheaper financing is one of the elements which enables a family of lower income to live in that kind of a house. For example, a $5,000, 25-year, 4½ per centum mortgage calls for financing charges of about $334 a year, or $28 a month. With a 32-year, 4 per centum mortgage the financing charges would be about $277 a year, or $23 a month. This device, therefore, results in lowering monthly financing charges in about the same proportions as would result from a reduction in the construction of the house of about $1,000, or 20 per centum.

The main objective of the Bill is to create a large, steady demand for new house production where no effective demand now exists. The segment of the housing market represented by middle income families is the mass market. In the aggregate, it is a highly stable market because, being in the middle, it is less affected by the ups and downs of our economy. In the main, the cost of the housing which has been produced by private enterprise has been beyond the means of the great bulk of our middle income families. Viewed realistically, there is no way in which we can reasonably expect to attain a sustained high annual volume of house production unless there is provided the means to enable private housing enterprise to produce housing within the financial means of these middle income families.

Many of the provisions of the Wagner-Ellender-Taft Bill are directed to this central point. The technical research provisions of Title II are directed to the development of new and improved techniques, materials and methods to stimulate increased production of housing and to permit progressive reductions in housing costs. Clearly a reduction in the capital cost of a house is one of the methods by which more housing can be produced within the means of middle income families. The plans contained in Titles IV and V represent financial devices through which the monthly costs of buying or renting new housing can be reduced so that more housing can be produced for middle income families who otherwise could not afford to obtain it. Clearly the reduction of monthly financing charges required to buy or rent housing is one of the methods by which more housing can be produced within the means of middle income families.

The provisions of the Wagner-Ellender-Taft Bill with respect to Federal aid for the acquisition of slums in blighted areas and their clearance preparatory to redevelopment also bear on this central point. The costs of assembling large tracts of land required for the redevelopment of blighted urban areas generally are extremely high. If a slum or blighted area is to be redeveloped primarily for dwelling use these land costs directly affect the kind and the amount of the housing which can be produced with a fair return on the required capital investment. To bring in sufficient revenues to provide for operating expenses, debt service, and a return on the capital investment it has therefore been necessary to construct multi-storied buildings providing a large number of dwelling units at relatively high rents.

Prior to the end of the war, the Chicago Plan Commission had developed tentative plans for three projects under the Illinois Neighborhood Redevelopment Corporation Law with rents ranging up to $68 per month. There was information to the effect that the initial plans for the Stuyvesant Town Project, which was to be developed after the war under the New York Redevelopment Companies Law, contemplated housing accommodations with rents up to $70 per month. These estimates were made sometime ago and would probably be considerably higher on the basis of the present market. It should also be borne in mind that the value of partial tax exemption charges granted under the New York Redevelopment Companies Law represents a very substantial amount which does not have to be capitalized from rents.

It seems clear, therefore, that the redevelopment of our urban slums and blighted areas for dwelling use, even if partial tax exemption of the redeveloped properties is granted under the State law, will require such high rents that the market for such housing will necessarily be confined to a relatively small proportion of the population. In turn, this means that the extent to which slums and blighted urban areas may be redeveloped for dwelling use by private enterprise through this type of State legislation is restricted in scope because the market for dwellings at such rents is relatively small. It also means that many of the families who now live in slums and blighted areas, and whose freedom of choice as to where they shall live is strictly limited by their rent paying ability, cannot be rehoused in these areas when redeveloped and must find housing elsewhere in the community at rents within the limits of their ability to pay.

It will add nothing to the permanent assets of any municipality, either in terms of its future development, its finances, or its means of serving the needs of its citizens, to create additional blighted areas in the process of redeveloping those which already exist.

Here again the provisions of Title VI of the Wagner-Ellender-Taft Bill are directed toward lowering the rents or sales prices which must be charged for the housing accommodations provided in the course of redeveloping for dwelling use the land in slums and blighted areas. In essence, Title VI would make Federal financial assistance available to the local community on a 2-to-1 matching basis to

write off the excess costs of the acquisition of land in slums and blighted areas to the point where, if, for example, it is redeveloped for dwelling use, its cost to the redeveloper would be such that the rents or sales prices for the dwellings would be within the financial reach of the housing market to be served. By thus making it possible to lower the rents and sales prices at which good housing could be provided in these redeveloped areas, it would make possible much greater participation by private housing enterprise in the redevelopment of these areas than otherwise would be possible.

In the main, it is fair to say that the real source of the opposition to the Wagner-Ellender-Taft Bill comes from the fact that it does provide some low-rent public housing for those families at the base of the family income pyramid.

There is simply no basis either in past experience or in present facts to justify our proceeding on the basis that the rate at which the welfare of the Nation requires our low income families to be rehoused can possibly take place through the ordinary operations of private housing enterprise and finance. There is no honest escape from the fact that some public low-rent housing is needed.

Everyone is in favor of providing an adequate volume of good housing for low income families now living in slums and blighted areas. It is at just about this point, however, that this unanimity of opinion ends and disagreement begins. While there is agreement upon the objective; there is disagreement only as to the means necessary to accomplish the objective.

Many of the groups opposing the Wagner-Ellender-Taft Bill because it provides some public housing seriously contend that it is not necessary—that the means best calculated and most desirable to remedy the unsatisfactory conditions under which a very large number of our families are housed is not through subsidized public housing, but by constructive measures to improve the earning power of this group. This ignores some very tangible truths.

It has been the firm and long-established policy of the Government of the United States to make possible equal opportunity for every individual to earn rewards for his labor according to his ability, and to improve, progressively, the standards and conditions under which its citizens live and work. Adherence to this policy has established, for the great majority of our citizens, standards of living and conditions of work unequalled elsewhere in the world. But this policy of the Government, and the private enterprise system which itself is preserved by that policy, both operate on the reality that, while men were created free and have an equal right to opportunity, they do not have an equal right to the rewards of opportunity excepting as they earn them—each according to his own ability. Thus, there is and always will be in this policy, and in the private enterprise system, this fundamental inequality—labor cannot be priced at more than the product thereof is worth even though the price at which it is bought may not permit the seller to earn a decent living for himself and his family.

This policy and this system work well for a majority of our citizens; but, for a

substantial minority, they do not. Even when most of our labor force is employed, large numbers of workers are frequently employed at wages which are not sufficient to enable their families, by their own means, to obtain a minimum of the essentials —including decent housing. Through constructive measures to improve the earning power of this group, the Government can and has reduced the number of families in this group. These measures include laws, both Federal and State, relating to educational policies and aids, minimum wages, hours of work, collective bargaining, health and safety, unemployment compensation, and disability and old age assistance. But the inequality in terms of rewards commensurate with ability, which is fundamental to our governmental policy and to the private enterprise system, cannot be entirely removed by such measures—unless we remove the private enterprise system too. Certainly there is agreement that we do not want to do that.

Necessarily, therefore, there will continue to be a sizable number of our citizens who, for one reason or another, will not earn sufficient income to enable them to live under conditions which the great majority of our people, and the Government which is representative of them, consider minimum. Unless we are willing to accept a governmental policy and an economic system which condemns a substantial minority of our citizens to live under conditions less than minimum, then the majority, for whom this policy and system work well, have the obligation to assure that the low income group will have the minimum essentials of life—including decent, safe, and sanitary housing. This is the "quid pro quo" for the retention of our established governmental policy and the private enterprise system.

It is because of these considerations that the principle that the Government should make financial assistance available to local communities to provide minimum decent, safe and sanitary housing for families of very low income has found wide acceptance. Of this principle Senator Taft has said:

"It is the best method which I have been able to discover. It is somewhat different from the method pursued in other fields, but it is the best method which I have been able to discover, after two years or more of hearings, by which we can hope to provide a reasonably decent standard of housing for a large number of people who are unable, whether through their own fault, through the fault of the system, or through misfortune, to obtain with their own means a reasonably decent standard of housing accommodations."[6]

On the whole, the Wagner-Ellender-Taft Bill steers a middle course. It does not go too far but, at the same time, the Senate has not been afraid to go far enough to provide the means to deal adequately with established housing needs. There is nothing in it which is entirely experimental in character or entirely untested by experience. Most of the changes made by Title II in the operations of the Federal Home Loan Bank Administration and the Federal Housing Administration have grown out of the operating experience of those agencies and have long been advocated by the private home financing institutions and private home builders participating in the programs now carried out through those agencies.

[6] 92 Cong. Rec., April 11, 1946, at 3582.

Title IV is essentially an extension of existing systems of FHA mortgage insurance to meet the special needs of families of moderate income who require more favorable financing terms than the present FHA systems offer. It is a realistic effort, based on some 12 years of operating experience, to further the original purpose of the FHA to encourage pioneering in the development of a wider market for housing by improved loan facilities and to make more attractive the investment of private funds in lower-cost housing.

As already pointed out, the yield insurance plan contained in Title V is, by and large, the FHA mortgage insurance system modified to meet the needs of direct investment in rental housing as compared with indirect investment in such housing through mortgage financing. In an article in the October issue of the Architectural Forum, Mr. Thomas Holden, President of the F. W. Dodge Corporation, indicates strong support for the yield insurance Title of the Wagner-Ellender-Taft Bill.

Title VII is largely a perfection and resumption of the system of aid to localities for low-rent public housing in a volume which, in the judgment both of the Taft Subcommittee and the Senate Banking and Currency Committee, admittedly is much less than the amount required to meet known needs.

Title VI is the first constructive effort to make possible sufficient progress in the rebuilding of slum and blighted urban areas (which thus far has, in effect, been limited to the size of the public low-rent housing program) by making possible their reuse for a variety of purposes, including private enterprise housing for middle and low income families, as well as for public housing.

In this connection it should again be emphasized that the desirability of Federal assistance to make possible the redevelopment of slums and blighted urban areas seems no longer to be in question; the question now relates to methods rather than to the objective. The Congress has already enacted the District of Columbia Redevelopment Act of 1945, which was sponsored by Senator McCarran of Nevada, Mr. Justice Burton, the junior Senator from Ohio when this bill was introduced in the Congress, and Senator Capper of Kansas. By this Act the Congress undertook to make $20,000,000 available to the District of Columbia for the acquisition and clearance of land in slums and blighted areas and to write off the excess cost of such land over its re-use value on a 50-50 matching basis with the locality.

On February 14, 1946, Congressman Baldwin of Maryland introduced the Slum Clearance Bill of 1946 (H. R. 5482), authorizing the appropriation of a billion dollars to the Reconstruction Finance Corporation for loans and grants to public bodies to acquire and clear slums and blighted areas for redevelopment. Here again the Federal Government would write off the excess land costs with the locality on a 50-50 matching basis.

Also, on April 18, 1946, Congressman Wolcott of Michigan, introduced H. R. 6205, which, among other things, would authorize a similar loan and capital grant program, aggregating one billion dollars, to be administered by the Reconstruction Finance Corporation. Under this bill also, the Federal Government would write off the excess land costs with the locality on a 50-50 matching basis.

The Veterans' Emergency Housing Program announced in February of this year called for the construction of 1,200,000 dwellings to be started in 1946 and 1,500,000 to be started in 1947. At present, the indications are that something close to 1,000,000 dwellings of all types, and including about 700,000 to 750,000 new permanent dwellings, will be started in 1946. It now appears that, in one year under the Veterans' Emergency Housing Program there will have been achieved an increase in the rate of house production comparable to that which after World War I took several years to attain. In terms of volume, it must be admitted that this is a remarkable achievement—especially in view of the critical shortage of various types of building materials which existed after V-J Day.

In terms of the distribution of the housing that is thus being produced, however, there are two major deficiencies. Not enough rental housing is being produced and veterans need a very substantial amount of rental housing. The lack of the Wagner-Ellender-Taft Bill, which was relied upon to make possible the production of an adequate volume of rental housing, is showing up in this area. Also, much of the housing that is being produced is priced too high for veterans. Here again, the lack of the Wagner-Ellender-Taft Bill is showing up. The Senate Committee on Banking and Currency was not unaware of this difficulty, as indicated by its statement that

". . . it is necessary to point out precisely and unequivocally how the bill now being reported is equally a part of the veterans' emergency housing program and equally indispensable to its achievement. . . .

"The veterants' emergency housing program calls for 2,700,000 houses to be started during 1946 and 1947. It is intended that these houses be for veterans and their families. Measures such as premium payments and allocations and priorities—contained in H. R. 4761 as reported by the committee—are essential to getting the materials with which to build these houses. But when these houses are built, and even to provide an effective and sound demand for them when they are built, they must be priced for sale or rent within the financial means of the majority of veterans and their families. Otherwise, it is obvious that these houses will go mainly to nonveterans' families of higher income. This would largely defeat the purposes of the veterans' emergency housing program."[7]

[7] Calendar No. 1147, SEN. REP. No. 1131, 79th Cong., 2d Sess. (1946) p. 3.

It must be recognized that the peak of the housing shortage probably has not yet been reached. While we have passed the peak of our military demobilization, the peak of newly formed families, resulting especially from the high marriage rate among veterans, may not be reached until some time this winter or next spring. Moreover, the shortage of housing is so great that even if the original goals of the Veterans' Emergency Housing Program of 1,200,000 starts in 1946 and 1,500,000 starts in 1947 are attained, only the sharp edge will be taken off the shortage. The pressures for the production of rental housing in a volume adequate to meet the needs of veterans, and to get more of the housing that is produced available at prices more in line with what veterans can pay, will be extreme. The potentials therefore clearly exist for much more extreme legislative proposals than the Wagner-Ellender-Taft Bill.

THE HOUSING CRISIS IN A FREE ECONOMY

ROBINSON NEWCOMB* AND H. C. KYLE†

"Crisis" is defined by one of the standard dictionaries as "a turning point in the progress of an affair or series of events." One may reasonably claim to be completely justified in considering the progress of housing to be both quite an "affair" and a real "series of events."

In this discussion, the writers are avoiding detailed analyses of such important subjects as housing needs, public housing, or the extent of submarginal housing. This study can therefore be confined to aspects of how the private economy operates in the housing field. We can watch how housing moves, from one turning point to the next, and possibly prescribe for the reduction of such turning points. The writers make no claim to the key to "solve" the housing problem.

The first thing anyone notices who looks at the data is the seriousness of the recurring crises in housing which seem to come as inevitably as taxes, death or winter. The fluctuations in the construction cycle are greater than those for the economy as a whole, or even for industrial production. The fluctuations are comparable to those in the production of capital goods, and are far greater than can be found for the production of any important non-durable commodity with a comparable wide market. (See Charts 1 and 2 and Tables 1 and 2 on next two pages.)

This is a qualitative rather than a quantitative statement, for we do not have good data on the volume of house building. Bureau of Labor Statistics data are based on building permits, which are largely an urban phenomenon, and do not necessarily reflect the volume of new units being provided outside city limits, or inside cities through conversion of existing facilities. Consequently, the Bureau's data may drop much more in poor years and rise more in active years than the volume of house building itself.

Some unpublished data from the War Production Board files may be used to illustrate this. It was necessary to know during the war how much material would actually disappear from the market, as contrasted with what should disappear if rules and official figures were completely followed. As an aid in estimating what would actually happen in contrast to what would be reported, a study was made of the number of units provided from 1930 to 1940, including units made available through alterations and through construction in rural non-farm areas. The data developed were compared with building permit data on the number of residential units added in the same period as officially reported by the Department of Labor,

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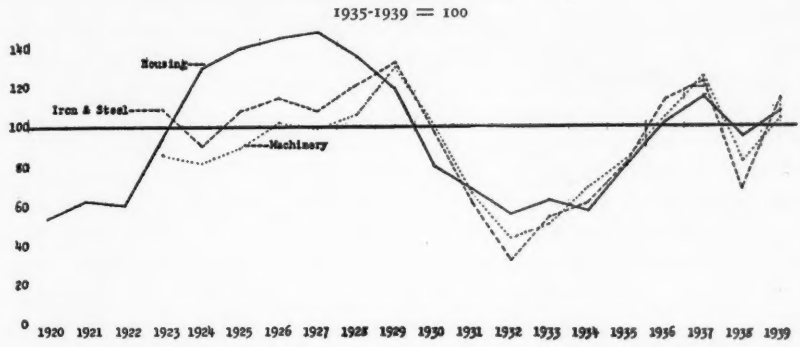
CHART 1. INDEXES OF NON-FARM HOUSING CONSTRUCTION AND PRODUCTION OF SELECTED DURABLE GOODS



Source: Housing Data, 1920-29 from Dept. of Commerce. 1930-39 from War Production Board (unofficial data).

Other Data, From Federal Reserve Board Indexes.

TABLE 1. INDEXES OF NON-FARM HOUSING CONSTRUCTION AND PRODUCTION OF SELECTED DURABLE GOODS.
1935-1939 = 100

Year	Housing*	Iron and Steel†	Machinery†
1920	53	...	..
1921	62	...	..
1922	60	...	..
1923	94	109	86
1924	130	90	81
1925	140	108	89
1926	145	115	102
1927	148	108	99
1928	136	121	106
1929	119	133	130
1930	80	97	100
1931	68	61	66
1932	55	32	43
1933	62	54	50
1934	57	61	69
1935	80	81	83
1936	102	114	105
1937	115	123	126
1938	95	68	82
1939	108	114	104

with the results shown in the following table (Table 3). Better data are available now than were available at the time the study was made, so the WPB estimates, if they were to be made now, would be somewhat different from the estimates made about five years ago. However, the difference probably would not be significant.

This table suggests that while the fluctuations in the number of units added may not be as great as appears from official statistics, they are still far greater than a free

CHART 2. INDEXES OF NON-FARM HOUSING CONSTRUCTION AND PRODUCTION OF SELECTED NON-DURABLE GOODS

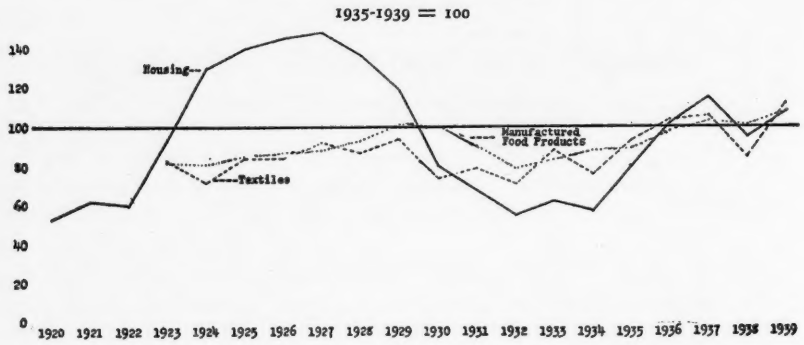


TABLE 2. INDEXES OF NON-FARM HOUSING CONSTRUCTION AND PRODUCTION OF SELECTED NON-DURABLE GOODS.

Year	Housing*	Textiles†	Manufactured Food Products†
1920	53	..	..
1921	62	..	..
1922	60	..	..
1923	94	83	82
1924	130	72	81
1925	140	84	85
1926	145	84	87
1927	148	92	88
1928	136	87	93
1929	119	94	101
1930	80	74	100
1931	68	79	90
1932	55	71	79
1933	62	88	83
1934	57	76	88
1935	80	93	89
1936	102	104	98
1937	115	106	103
1938	95	85	101
1939	108	112	108

* 1920-1929 data from Dept. of Commerce, 1930-1939 data from War Production Board.
† From Federal Reserve Board Indexes.

TABLE 3. NUMBER OF NON-FARM RESIDENTIAL UNITS ADDED BY YEARS.

	Official BLS Reports	Unofficial WPB Estimates		Official BLS Reports	Unofficial WPB Estimates
1930	330	464	1935	221	457
1931	254	391	1936	319	586
1932	134	314	1937	336	658
1933	93	354	1938	406	546
1934	126	325	1939	515	617

economy can stand with any comfort. The WPB figures suggest that the number of new housing units supplied at the depth of the depression was only about a third of the 937,000 estimated by the BLS, and of the 832,000 estimated by the Department of Commerce to have been supplied at the high point in the curve.

There are many factors entering into this feast and famine aspect of the house construction market. Some of these factors are common to the production of all durable goods or capital goods, though there are aspects of even these factors which are peculiar to the housing field. Other factors are unique to the housing field itself. A mental review of what happens during the housing cycle may suggest some of the factors that are inherent in the normal free market relationships in this field and suggest how difficult it has been to do more than talk about stabilizing the industry.

Suppose we start our review at the bottom of the construction cycle in a small community which begins to come out of a depression with a surplus of 100 houses in terms of its capacity to support housing, and with a growth of the number of families in the community which averages about 35 a year. Under such circumstances while there might be a housing shortage in terms of social need, there would be no shortage in terms of commercial markets for more than three years, because it would take longer than that for the normal rate of growth in the number of families to be reached. There would be building of course, even at the bottom of the depression, for even then some families would want a particular type of house in a certain block and be able to pay for what they want. But there would be no sizable volume of building. However, as the community got on its feet family formation would increase and soon there would be undoubling of existing families. Undoubling for a time might add 15 a year to the effective demand for housing. Within a few years the industry would wake up to the fact that there were few vacancies and that there was a potential increase in the number of families of 50 a year, or 35 through normal growth, plus 15 through undoubling. Industry might build five houses, or even 10, the first year, maybe 20 the second year after the bottom of the depression, 35 the third year, and 50 the fourth year without increasing vacancies. It could continue to build at the rate of 50 a year for another two or three years without increasing the number of vacancies. But after undoubling began to decline and new family formation dropped to 35, vacancies would begin to appear if the industry were to continue at the rate of 50 houses a year.

A small vacancy, possibly one of 5 per cent, would be desirable and would not cause any worry. A slight increase in the number of vacancies and increasing difficulty in disposing of houses might result in a slight decrease in the number of houses built and better value for those buying them, but sooner or later industry would have to drop to an average of 35. But it would not do this in time.

Vacancies do not appear until after houses have been built and until the industry has been geared to a rate greater than the market can absorb at the prices charged.

Prices do not fall rapidly enough to maintain the demand, and owners of existing properties may begin to offer concessions in price before the construction industry cuts its prices. This encourages the use of existing properties rather than new ones, or it will at least tend to discourage new construction. If a general decline in income or employment occurs at this time, doubling-up begins again. The volume of new family formation might drop to 20, in place of the previous figure of 50. For a short time family formation might drop even below this, and if the industry continued to produce even at a rate of 20 or 30 houses a year surpluses could increase and construction might almost stop. The cycle would then start over again and it might be several years after general business picked up before the volume of housing construction would again equal the average increase in the number of families.

To state it more briefly, industry adjusts itself to a volume which will take care of a shortage plus normal growth, keeps on building at this rate after the shortage disappears, finds a surplus on its hands, shuts down until another shortage develops, and then starts the next turn on the merry-go-round.

This sharp fluctuation could be reduced if the industry could adjust its prices to changes in family income. If, as family incomes drop the price of new housing could also drop, sales would not vary as they do. There are many reasons why this has not happened. One of the reasons that the construction industry finds it hard to adjust its prices to changes in demand is the handicraft nature of its site assembly methods. As production increases on a belt line operation, unit costs tend to drop. As production increases in a handicraft operation of a conventional nature, unit costs do not necessarily tend to drop. After a time less skilled workers must be employed, or overtime resorted to. Manhours per unit of output will then tend to go up. Because sizable commitments for building materials usually are not made for a long period in advance in the housing field, as is the case in more important manufacturing industries, prices for material and equipment also may go up as volume increases. So we have the phenomenon of an industry pricing itself out of a market as sales increase.

On the other hand, when the market is obviously shrinking, and unemployment in the house building industry becomes serious, costs do not drop rapidly. The prices of some building materials actually were higher in 1933 than in 1929. This failure of the price of building materials to follow changes in the size of the market is due in part to the fact that the price of no one material has much effect on the price of a finished house. If the producers of one material reduce prices, producers of other materials, and labor, will get more benefit from the reduction in price than will the companies reducing their prices.

Labor, too, can resist price reductions in a declining market for a while. It may be easier to slow down on a handicraft operation than it is in a manufacturing operation in which speed is controlled by the machine or the belt. It is a natural trait hallowed by long practice to spread the work as employment opportunities de-

crease, and so some costs rise as volume decreases—just as others rose as volume increased.

Nor is there a strong immediate incentive to reduce prices due to competition with the existing supply of housing, such as there may be in the field of manufactured consumer goods when production exceeds sales. The more durable and less affected by style changes a given commodity may be, the greater is the temptation to hold prices up in the hopes of selling it at the price originally planned. If goods are likely to spoil or lose their style value there may be more incentive to reducing prices of existing stocks, thereby forcing those that are manufacturing new stocks to reduce prices to compete. The construction industry is not subject to this type of rapid pressure and may not be compelled to reduce its prices or costs to any major degree till long after a decline sets in. By the time it has gotten around to reducing prices, its home building volume will have been seriously reduced.

This historical tendency to shift from overproduction to underproduction is reinforced by the fact that industry has tended to concentrate on the upper income group. There are not as many families in the upper income groups as in the middle and lower income groups, so the oversupply of houses (in terms of capacity to pay, not in terms of need) must be absorbed by families whose income is lower than the income of the families for whom houses were designed. This means a sizable depreciation in value must take place. That does not happen rapidly so the industry must mark time while the oversupply of housing for the upper income brackets finds it way down to the mass markets. The famine period for the industry, which would be long enough if it had overbuilt in each income range, is extended because it has concentrated its overbuilding in the upper income ranges. The dull period for the industry may therefore be a long one.

These factors which tend to make for violent fluctuations have their influence reinforced by the long life of the average house. There are, roughly, 32 million non-farm housing units in the country. If we add 1,200,000 a year to that number, we are adding almost 4 per cent, because very few of the 32 million will disappear from the market in a given year. If the average life were 20 or 25 years, almost 4 per cent of the houses might disappear in a given year so that 1,200,000 new houses would be needed just to maintain the supply. Fluctuations in the rate of family formation would then affect demand over and above this replacement market. Effective demand therefore might vary from 1.2 million per year to 2 million per year, rather than from 300,000 to possibly 1,200,000 per year.

Other influences strengthening these tendencies are discussed elsewhere in this symposium, so the point will not be elaborated further here.

The same factors which have made for great variations in the demand for new housing in the past may continue to do so in the immediate future. For instance, the Census estimates that the increase in the number of families during each half of 1947 will be about 525,000, but that in the last six months of 1949, only two years later, the increase will be only about 175,000. That is a drop of two thirds. A slight

recession in income, or changes in other factors could cause very appreciable changes from the Census figures and therefore could accentuate the tendency for the private house building industry to continue to fluctuate wildly in the future. Unless there is a significant change in the policies of the private house building industry, activity may continue to move from one turning point in an affair to another, from one crisis to the next.

Despite the almost fatalistic appearance of the forces causing the sharp cycles in the industry, and the holding down of housing standards for the lower rent families, there appears to be good reason to believe that the construction industry can change its policies. Not all the influences causing trouble are entirely beyond the control of the industry. Decisions to build at price levels which match incomes, and to reduce costs, particularly as volume rises, for instance, are decisions which would affect the volume and stability of house building and which within limits are subject to conscious control by the industry itself. If these and other difficulties are vigorously attacked, housing markets could be very decidedly increased, housing standards raised and fluctuations in construction reduced toward the order of magnitude of those in the consumer goods market.

While the first things that attract attention when one looks at the data on the private house building industry are the extreme fluctuation in its rate of activity and the fact that it always misjudges its effective market both in volume and in price range, it should be pointed out in fairness to the industry that we have a higher standard of housing than almost any other country, and that we have steadily improved our standards. Even today, following the nearest approach to an all-out war that this country has experienced, we have a higher standard of housing than we had in 1940.

Much of our housing is poor, not in relation to what we have had in the past, and not in relation to what most countries have, but in relation to the technical capacity of the country to provide shelter. However, if the industry could operate at capacity and produce the housing it knows how to produce, at a profit for each income level, our housing standards would be further improved. Private industry has shown a technical capacity to improve housing standards. Better management and planning can result in private industry raising our housing standards nearer to what its technical resources would permit. To the extent that the housing industry fails to utilize its managerial abilities in this direction other approaches will be needed.

The following table (Table 4) illustrates how our housing standards have been raised even during the five years of war and preparation for war.

This table shows that even during the war we were able to provide better heating, plumbing, and other facilities for our families than we had provided before. There is therefore good reason to believe that private industry can do much in a free economy to improve both housing standards, and the stability of the industry.

We were able to do this during the war in large part because of a sharp increase

TABLE 4. OCCUPIED DWELLING UNITS, BY STATE OF REPAIR AND PLUMBING EQUIPMENT, FOR THE UNITED STATES, URBAN AND RURAL NON-FARM: 1945 AND 1940.*
(In thousands of units)

State of Repair and Plumbing Equipment	Estimated Number		Increase 1940 to 1945†		Per cent	
	1945	1940	Number	Per cent	1945	1940
Total Occupied Dwelling Units	*31,281*	*27,748*	*3,533*	*12.7*	*100.0*	*100.0*
With private bath and private flush toilet	23,378	18,653	4,725	25.3	74.7	67.2
With private flush toilet, no private bath	1,474	1,450	24	1.7	4.7	5.2
With running water, no private flush toilet	2,917	3,134	− 217	− 6.9	9.4	11.3
No running water in dwelling unit	3,512	4,511	− 999	−22.1	11.2	16.3
Dwelling units not needing major repairs	*28,318*	*23,830*	*4,488*	*18.8*	*90.5*	*85.9*
With private bath and private flush toilet	22,464	17,340	5,124	29.6	71.8	62.5
With private flush toilet, no private bath	1,163	1,120	43	3.8	3.7	4.0
With running water, no private flush toilet	2,337	2,435	− 98	− 4.0	7.5	8.8
No running water in dwelling unit	2,354	2,935	− 581	−19.8	7.5	10.6
Dwelling units needing major repairs	*2,963*	*3,918*	*− 955*	*−24.4*	*9.5*	*14.1*
With private bath and private flush toilet	914	1,313	− 399	−30.4	2.9	4.7
With private flush toilet, no private bath	311	330	− 19	− 5.8	1.0	1.2
With running water, no private flush toilet	580	699	− 119	−17.0	1.9	2.5
No running water in dwelling unit	1,158	1,576	− 418	−26.5	3.7	5.7

*Source: Bureau of the Census, Series H-46, No. 1.
† A minus sign (−) denotes decrease.

in family incomes in relation to housing costs. Families could afford better housing in 1945 than they could afford in 1940. The current housing shortage is caused principally by an increase in income and not by a failure in the supply of housing to keep pace with the normal increase in the number of families. It is caused by an increase in demand in excess of the normal growth in the number of families.

The Census study from which the table above is extracted indicates that there was an increase of 2,745,000 by November, 1945, over the figure for April, 1940, in the total number of occupied units, and an increase of 3,533,000 in occupied non-farm units for the same period. The latter figure represents an annual growth of about 650,000 in the number of families. The average annual increase in the number of non-farm families is not expected to be much over 650,000 in the 40's, or much over 400,000 in the 50's. The country therefore provided as much housing as it needs on an average to take care of the increase in the number of families; moreover, housing of higher standards was occupied at the end of the war than at the beginning. (This is not to imply that more and better housing was not needed during the war.) From the standpoint of long time average effective demand, the industry did all that was required, and about all the WPB controls would permit. But the industry did not provide housing to meet the effective demand caused by the change in family income.

This wartime experience is a clue to one of the reasons why private industry can go still farther toward raising housing standards, increasing volume and reducing fluctuations. During the war national income rose, but controls on industry and on

CHART 3. 1945 TO 1960 CONSTRUCTION REQUIREMENTS FOR NON-FARM DWELLING UNITS AT 1960 PRICES BY RENT CLASSES UNDER ASSUMPTIONS OF THIS STUDY

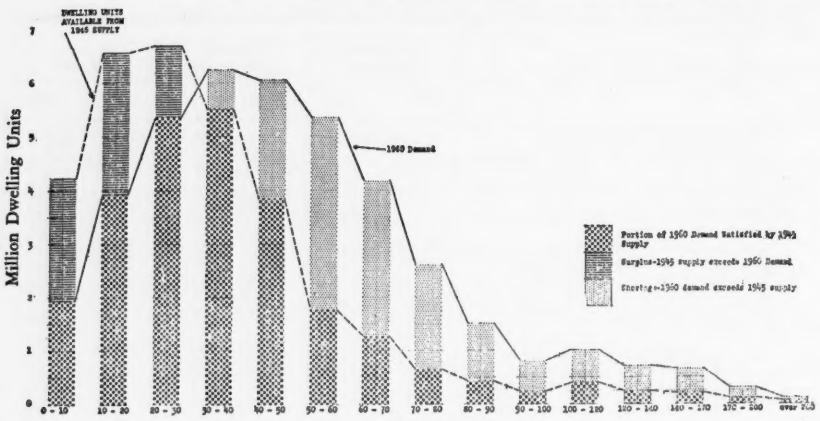


TABLE 5. DEMAND FOR NON-FARM DWELLING UNITS BY 1960 AT 1960 PRICES.
(All estimates in thousands)

Rent Class $ Per Month	Number of 1945 Dwelling Units Available in 1960	Estimated Demand for Dwelling Units 1960	Portion of 1960 Demand Satisfied by 1945 Supply	Shortages	Surplus
0 - 10	4,228	1,931	1,931	.....	2,297
10 - 20	6,559	3,926	3,926	.....	2,633
20 - 30	6,707	5,367	5,367	.....	1,340
30 - 40	5,515	6,245	5,515	730	.....
40 - 50	3,852	6,045	3,852	2,193	.....
50 - 60	1,772	5,355	1,772	3,583	.....
60 - 70	1,261	4,183	1,261	2,922	.....
70 - 80	646	2,620	646	1,974	.....
80 - 90	441	1,511	441	1,070	.....
90 - 100....	239	805	239	566	.....
100 - 120....	406	1,025	406	619	.....
120 - 140....	240	712	240	472	.....
140 - 170....	215	663	215	448	.....
170 - 200....	108	300	108	192	.....
Over 200....	65	128	65	63	.....
TOTALS.....	32,254	40,816	25,984	14,832	6,270

prices kept construction costs down. Consequently, the purchasing power for housing was increased. If in the post-war period industry can itself hold prices down, this improved relationship of income to housing costs can be maintained. To the extent that this improved relationship is maintained, housing markets will go up.

A quick look at the figures in Table 5 (accompanying Chart 3) relating to the number of housing units demanded in each rental range will indicate why the market will

be so much bigger if there is only a slight improvement in the relation of construction costs to income. There are far more people who can afford to pay $60 a month for their housing than can pay $70, and more who can afford to pay $50 than $60, and so on down the line. If construction costs stay down, so that in terms of constant prices families who previously could pay only $50 can now afford to pay the equivalent of $65, these families will not find enough $65 houses. Consequently, even if every existing $65 house were vacated, and families living in $50 units were to move to these houses, there would still be a demand for new $65 houses. That in brief is why it is so important for the construction industry to hold its costs to an increase roughly 40 per cent over the 1940 levels in order that a margin may be kept between the new construction costs and the new incomes. It enables the industry to find a market in rehousing existing families in addition to the market created by the increase in the total number of families.

If the industry will hold its increase in prices and costs to a level sizably below the increase in family incomes, for the first time in history it will be going after a replacement market as well as the market created by the increase in the number of families. If, in addition, it distributes its new housing in price ranges commensurate with the demand instead of building for the upper income families, it will increase its replacement market immediately and sharply. Instead of having to adjust itself to a fluctuating increase in the number of families which in the near future may level off at about 400,000 a year, it may be able to adjust itself to a market averaging around a million a year. The steps necessary for this readjustment and shift to a more profitable basis are steps which the industry can take. They do not present insurmountable obstacles.

The major step that must be taken to achieve this objective of stability, increased markets and higher housing standards, is that of holding down construction costs. If they can be held within 140 per cent of the 1940 levels and family incomes maintained at the 1945 levels, the market will be approximately double what it would be if construction costs rise as much as income. Costs now are much higher than 140 per cent of 1940 because production of materials is much below capacity, and prewar efficiency and post-war possibilities have not been achieved in the manufacturing of building materials. Construction costs are high also because of uncertain deliveries, uncertain prices and temporarily lower labor efficiency at the site, which makes it impossible to build at costs which should be reached in the near future. It is encouraging that men with competence in the field believe that construction costs can be held to levels not far from 40 per cent above those prevailing in 1940.

The second step that must be taken is to build to the market, that is to the income distribution of the families able to rent or buy housing units. If the industry continues to build for the upper income group, it will have to wait long periods for property to depreciate, between spells of activity. If it will build directly for the huge market created by the increase in family incomes, it will not have to wait for property to depreciate and will not have to limit itself to the increase in the number

of families. There are many other minor and some relatively important steps which should be taken, but these two are essential. If these are taken, many other steps will follow more or less automatically.

The problems of holding down building costs are somewhat the same the country over. The problems of calculating the market to which to build will differ from city to city. We may illustrate the demand that will be created by these two steps by making some rough calculations for the country as a whole rather than for any one city. This will illustrate how the market, housing standards and stability could be increased in any area in which the industry were to build to the demand in each group.

The basic data needed for the house building industry to develop a program for volume and pricing which would make a huge market profitable and relative stability possible are available to the industry. We know a great deal about the family formation. We know an increasing amount about the income and rental distribution which controls the housing market. By projecting these facts we can determine within relative workable margins of error the markets for housing. The following tables indicate two sets of premises which may be used by the industry in calculating its markets. Our first assumption in the first set of premises (designated herein in text, charts and tables as the Basic Assumption or Assumption A) is that construction, rents and values will level off about 40 per cent above the 1940 base. This may be too high or too low, but for our purpose it appears to be a satisfactory figure. We assumed that the Census estimates for the number of families in 1960 are approximately correct, that approximately 6,000,000 of the families in 1960 will be farm families, so that the total number of non-farm families (to which this discussion is limited) will be about 38,775,000. We used depreciation rates for the housing existing in 1945 that depended on the 1945 values. The rates we used are shown in the following table (Table 6). Next we assume that the per capita family income after taxes in 1960 will be approximately equivalent to that in 1945. This may mean a slight reduction in real income after taxes because the cost of living may be higher in 1960 than it was in 1945. There are reasons why this assumption may be too optimistic and why it may be too pessimistic. For instance, the income of individuals is already higher than it was in 1945. Members of the armed forces should be getting more in 1960 as civilian workers than they were getting in 1945 working for the Army or the Navy. On the other hand, unemployment may be lower now than we may expect for the long pull. And there may be fewer women, old, and very young workers employed per family by 1960 than there were in 1945. But if any allowance is to be made for increased productivity during the next 15 years, it would seem that the family incomes of 1960 might at least approximate the levels of 1945.

It was assumed finally, in the first set of premises, that the proportion of non-farm disposable income available for rent or rental equivalent will be about 15.3 per cent as compared with 15.8 per cent in 1939, and 17.8 per cent in 1929. This is based

TABLE 6. 1945 NON-FARM HOUSEHOLDS.
(1940 and 1960 prices)

Rent Class $ Per Mo.	1945 Homes 1940 Prices (000)	Depreciation (Per cent per year)	Total Depreciation (Per cent)	Net Price Change* (Per cent)	1945 Homes 1960 Prices (000)	Fire and Demolition Losses 1945 - 1960 (000)	1945 Homes Available in 1960 - 1960 Prices (000)
0 - 10	4,372	2.66	40.0	0.	4,372	144	4,228
10 - 20	7,326	2.33	35.0	5.0	6,649	90	6,559
20 - 30	7,863	2.10	31.5	8.5	6,770	63	6,707
30 - 40	6,211	1.80	27.0	13.0	5,560	45	5,515
40 - 50	3,029	1.80	27.0	13.0	3,892	40	3,852
50 - 60	1,510	1.60	24.0	16.0	1,799	27	1,772
60 - 70	817	1.60	24.0	16.0	1,275	14	1,261
70 - 80	468	1.50	22.5	17.5	654	8	646
80 - 90	298	1.33	20.0	20.0	445	4	441
90 - 100	202	1.33	20.0	20.0	242	3	239
100 - 110	166	1.20	18.0	22.0	229	3	226
110 - 120	124	1.20	18.0	22.0	183	3	180
120 - 130	96	1.15	17.3	22.7	131	2	129
130 - 140	62	1.15	17.3	22.7	113	2	111
140 - 150	46	1.15	17.3	22.7	99	1	98
150 - 160	37	1.10	16.5	23.5	65	1	64
160 - 170	28	1.10	16.5	23.5	53	†	53
170 - 180	20	1.00	15.0	25.0	41	†	41
180 - 190	14	1.00	15.0	25.0	38	†	38
190 - 200	8	1.00	15.0	25.0	29	†	29
200 & over	7	1.00	15.0	25.0	65	†	65
TOTALS...	32,704	....	....	....	32,704	450	32,254

* A 40% increase in the price level from 1940 to 1960 was assumed (the Basic Assumption in text above).
† Less than ½ thousand.

on the belief that there will be a long-time downward trend in the ratio of the housing expenditures to income, but that the decline from 1929 to 1939 was much greater than the long-time average. The depression of the 30's reduced expenditures for housing, and incomes started to rise toward the end of the period. A smaller proportion of the disposable income therefore went for rent or rental equivalent in 1939 than would have been required had there been 10 prosperous years during the 30's. The use of the 15.3 per cent figure is about the equivalent of suggesting a decline of one third in the proportion of the income going to rent over a period of a century. The following charts and accompanying tables show the operation of this Basic Assumption.

As can be seen from these charts and accompanying tables, variations from these assumptions were also developed. One of these was that there would be an increase in construction costs and rent and rental equivalent of 50 per cent above the 1940 base. Another one was an increase of 30 per cent in these three items. Still another change in the assumptions was for a variation of 5 per cent in the proportion of income going to rent above and below the 15.3 per cent used.

A somewhat different assumption was set forth by Mr. Wyatt (referred to in the charts and tables as Assumption B) in his testimony before the House Banking and Currency Committee. The data presented in this testimony suggest Mr. Wyatt

CHART 4. EFFECT OF VARYING THE ESTIMATED PROPORTION OF NON-FARM DISPOSABLE INCOME GOING TO RENT IN 1960

(Other Basic Assumptions Remaining Unchanged)

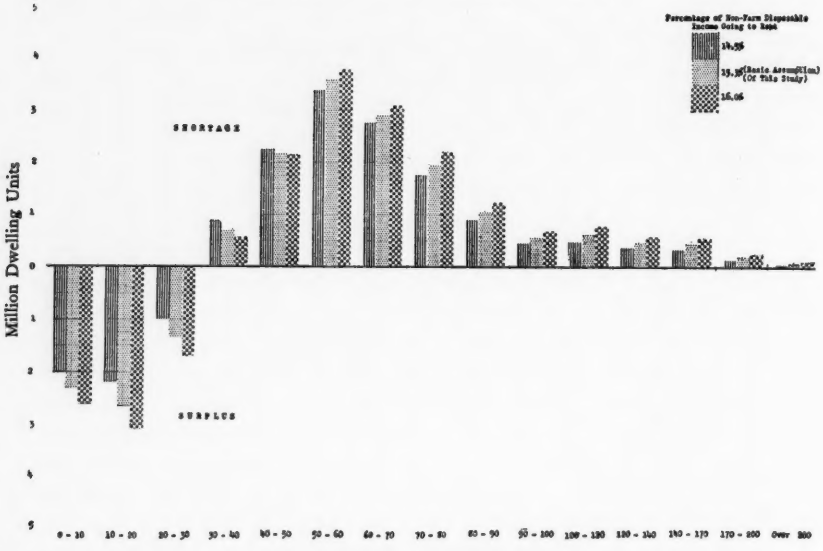


TABLE 7. EFFECT OF A 5% VARIATION ABOUT THE BASIC ASSUMPTION THAT RENT EQUALS 15.3% OF NON-FARM DISPOSABLE INCOME IN 1960.
(Other Basic Assumptions Remaining Unchanged)
(Thousands)

Rent Class	PER CENT OF INCOME GOING TO RENT					
	14.5%		15.3% (Basic Assumption)		16.0%	
	Shortage	Surplus	Shortage	Surplus	Shortage	Surplus
0 - 10	.....	1,992	.....	2,297	.....	2,596
10 - 20	.....	2,176	.....	2,633	.....	3,078
20 - 30	.....	984	.....	1,340	.....	1,689
30 - 40	893	.....	730	.....	566	.....
40 - 50	2,244	.....	2,193	.....	2,144	.....
50 - 60	3,383	.....	3,583	.....	3,783	.....
60 - 70	2,755	.....	2,922	.....	3,090	.....
70 - 80	1,750	.....	1,974	.....	2,199	.....
80 - 90	898	.....	1,070	.....	1,239	.....
90 - 100.....	450	.....	566	.....	679	.....
100 - 120.....	483	.....	619	.....	761	.....
120 - 140.....	364	.....	472	.....	576	.....
140 - 170.....	339	.....	448	.....	557	.....
170 - 200.....	132	.....	192	.....	237	.....
Over 200.....	23	.....	63	.....	94	.....
TOTAL.....	13,714	5,152	14,832	6,270	15,925	7,363

CHART 5. EFFECT OF A 10 PER CENT VARIATION ABOUT THE BASIC ASSUMPTION THAT IN 1960 HOUSING VALUES AND CONSTRUCTION COSTS WILL BE 40 PER CENT ABOVE 1940 LEVELS

(Other Basic Assumptions Remaining Unchanged)

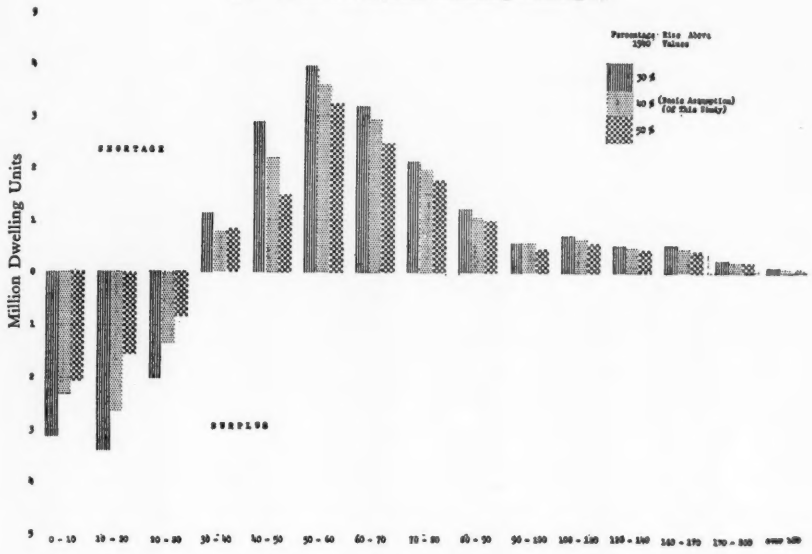


TABLE 8. EFFECT OF A 10% VARIATION ABOUT THE BASIC ASSUMPTION THAT IN 1960 HOUSING VALUES AND CONSTRUCTION COSTS WILL BE 40% ABOVE 1940 LEVELS.
(Other Basic Assumptions Remaining Unchanged)
(Thousands)

Rent Class	1940 - 1960 Estimated Price Rise					
	30%		40% (Basic Assumption)		50%	
	Shortage	Surplus	Shortage	Surplus	Shortage	Surplus
0 - 10	.....	3,125	.....	2,297	.....	2,045
10 - 20	.....	3,377	.....	2,633	.....	1,544
20 - 30	.....	1,994	.....	1,340	.....	833
30 - 40	1,123	.....	730	.....	780	.....
40 - 50	2,880	.....	2,193	.....	1,490	.....
50 - 60	3,943	.....	3,583	.....	3,224	.....
60 - 70	3,183	.....	2,922	.....	2,725	.....
70 - 80	2,121	.....	1,974	.....	1,761	.....
80 - 90	1,221	.....	1,070	.....	992	.....
90 - 100	563	.....	566	.....	448	.....
100 - 120	697	.....	619	.....	550	.....
120 - 140	508	.....	472	.....	431	.....
140 - 170	507	.....	448	.....	399	.....
170 - 200	224	.....	192	.....	179	.....
Over 200	88	.....	63	.....	5	.....
TOTAL	17,058	8,496	14,832	6,270	12,984	4,422

CHART 6. ESTIMATED PERCENTAGE DISTRIBUTION OF OCCUPIED NON-FARM DWELLING UNITS UNDER ASSUMPTIONS. "A"—BASIC ASSUMPTIONS OF THIS STUDY—AND "B"—AVERAGE FAMILY INCOME 20 PER CENT BELOW 1945

(Price level 40 per cent above 1940)

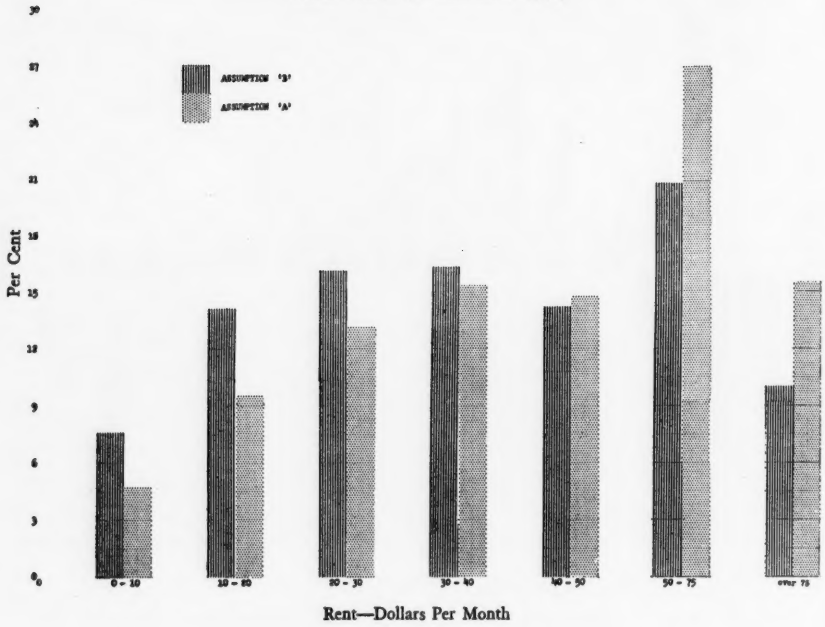


TABLE 9. ESTIMATED PERCENTAGE DISTRIBUTION OF OCCUPIED NON-FARM DWELLING UNITS UNDER ASSUMPTIONS "A"—BASIC ASSUMPTIONS OF THIS STUDY—AND "B"—AVERAGE FAMILY INCOME 20% BELOW 1945.
(Price Level 40% Above 1940)

Rent Class	Assumption A	Assumption B
$ Per Month	*Per cent*	*Per cent*
0 - 10	4.7	7.6
10 - 20	9.6	14.1
20 - 30	13.2	16.1
30 - 40	15.3	16.3
40 - 50	14.8	14.2
50 - 75	26.9	20.7
Over 75	15.5	11.0
	100.0	100.0
Average Rent Per Month.....	50.19	42.60
Median Rent Per Month.....	44.89	37.65

CHART 7. PERCENTAGE DISTRIBUTION OF OCCUPIED NON-FARM DWELLING UNITS FOR SELECTED PERIODS AT 1940 PRICE LEVEL

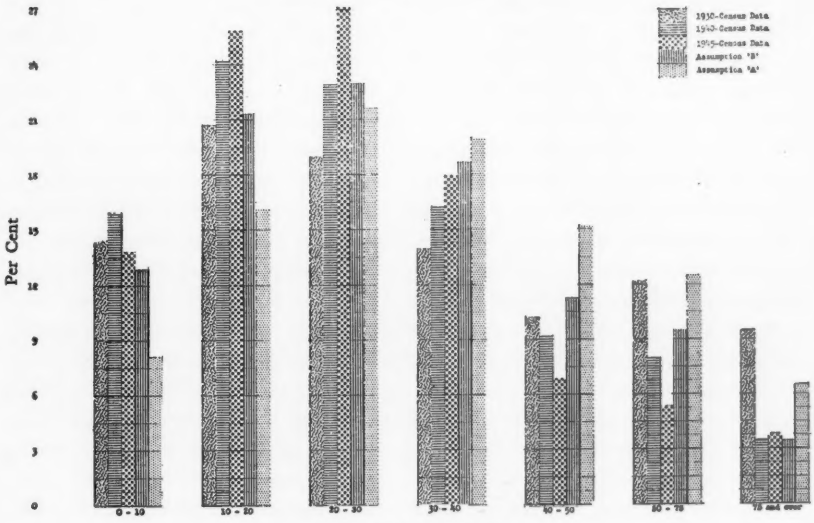


TABLE 10. COMPARISON OF THE PERCENTAGE DISTRIBUTION OF OCCUPIED DWELLING UNITS UNDER ASSUMPTIONS "A" AND "B" WITH THE DISTRIBUTION REPORTED BY THE CENSUS IN SELECTED YEARS.
(All at 1940 Prices)

Rent Class	Census Years			Assumption	
	1930	1940	1945	B	A
$ Per Month	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*
0 - 10	14.50	15.97	13.85	12.88	8.10
10 - 20	20.70	24.23	25.85	21.30	16.10
20 - 30	19.00	22.87	27.10	22.95	21.60
30 - 40	13.95	16.29	17.95	18.66	20.00
40 - 50	10.20	9.24	6.85	11.27	15.20
50 - 75	12.19	7.97	4.60	9.52	12.50
Over 75	9.46	3.43	3.80	3.42	6.50
	100.0	100.0	100.0	100.0	100.0

assumed a decline of about 20 per cent in the money income of families below the 1945 levels. For the purposes of this study we used this as the basis for the second set of calculations on the probable housing market, but kept the other assumptions constant. Chart 6 (and accompanying Table 9) compares the possible market on the basis of the assumption used by Mr. Wyatt and the basic assumption used in this

study, including the effect of these two assumptions on median rents, and on the distribution of the rents by price classes.

Chart 7 (and accompanying Table 10) compares the distribution of occupied dwellings according to monthly rent or rental equivalent which prevailed in 1930, 1940, and 1945, according to Census reports, and the distribution which would prevail in 1960 under each of the two assumptions. The 1940 price level has been used as a common denominator, and each of the other distributions has been adjusted to this basis. It will be noted that, compared with the 1930 distribution, Assumption A presumes a decided shift from the lowest rent groups toward the medium rents as well as a sizable decrease in the percentage paying over 75 dollars a month. Assumption B allows for a small percentage reduction in the lowest rent class only, a small increase in the houses renting for 10 to 30 dollars, and a very considerable reduction in those costing over 75 dollars a month.

The following table (Table 11) gives the picture in more detail showing the possible demand for housing by 1960 on the basis of the two sets of assumptions. If the first premise is correct, and income stays up and costs are held down, there will be a commercially effective demand for nearly 15 million units between now and 1960. Over half of these will be in the price class of $40 to $70, or in terms of 1940 prices a $30 to $50 range. If Mr. Wyatt's assumption as to income is correct, with other things remaining unchanged, there will be an effective commercial demand for about 11 million units. Under the assumptions used, each increase or decrease of 5 per cent in the family income, cost of construction or rent or rental equivalent has the effect of reducing the potential market by about 1,000,000 units. Consequently, a 20 per cent cut in income premised by Mr. Wyatt reduces the market very decidedly, as shown in the preceding table.

TABLE 11. POSSIBLE DEMAND FOR HOUSING BY 1960 UNDER ASSUMPTION "A" AND "B." (Thousands)

Rent Class	ASSUMPTION A		ASSUMPTION B	
	Shortage	Surplus	Shortage	Surplus
0 - 10	.....	2,297	.....	1,126
10 - 20	.....	2,633	.....	804
20 - 30	.....	1,340	.....	136
30 - 40	730	.....	1,138	.....
40 - 50	2,193	.....	1,944	.....
50 - 75	7,679	.....	5,041	.....
Over 75	4,230	.....	2,505	.....
TOTALS	14,832	6,270	10,628	2,066

The figure of the potential market of approximately 15,000,000 for the next 15 years on the basis of our first assumption should be contrasted with the expected increase in the number of families, which is estimated by the Census to be roughly 7,500,000; that is, if the historical methods of operation in the construction industry

were to be followed in the next 15 years we would have a commercial market for about 7,500,000 families.

About half of the 15,000,000 market is independent of the increase in the number of families. By holding down costs and building to the income distribution therefore, fluctuations should be sharply reduced. Even if the marriage rate falls the rehousing market would still be with us. By developing two markets instead of relying on one, we would be increasing the volume and the stability of the industry.

Under the second assumption, which would appear to be the most pessimistic one we would care to make—a decline of 20 per cent in the national family income—we would still have a rehousing market of nearly 3 million houses during this 15-year period if the industry will hold down costs and build to the market. This would be in addition to the demand caused by the increase in the number of families. Historically the industry has not developed any replacement demand but has assumed that little could be done but build houses to last 80 years or more. So that even this very conservatively estimated 3 million market would be a net gain of 3 million for the industry.

In the consumer goods industries there is always a market from existing consumers because of the short life of most consumers goods. There is usually in addition a market caused by an increase in the number of consumers. In durable goods industries other than housing there is a market caused by replacement of existing goods as more efficient producer goods are developed, or as existing producer goods wear out. If the housing industry will build to the market it too can secure some of this type of business.

The present flash commercial market for housing in some respects makes it easier to start developing a rehousing market. It will demonstrate to the industry that there is a mass market for low-priced housing, and it is this low-priced housing in which it will be easiest to use the new techniques which have been becoming available to the industry. During the war it was necessary to build a thousand-house development at a clip, and there was a considerable advance in construction methods. These advances have indicated that it is technically and administratively possible to reduce construction costs as the material and labor supply becomes adequate. For instance, the belt line process in the factories has been adapted to building of houses. Even before the war this had been done by some firms who learned to have highly specialized workers move past the site in a regular sequence, instead of having the article being produced moving past the specialized worker, as occurs in most belt line manufacturing processes carried on under a roof. Other firms reduced costs by more conventional methods of assembling parts of houses under roofs and then completing the assembly on the site.

The growth of large building organizations has brought an increase in the managerial abilities of the field and this competition has resulted in increasing the skills of smaller builders. The pressure for reducing cost is being aided too by new industrial capacity, developed during the war, which is being utilized in the building

products field. This means that improved building materials are now in prospect, which can be used in the low cost mass market. Acceptance on the part of builders of these newer techniques and managerial abilities for the purpose of building at competitive prices in the mass market could result in production of houses at a profit and in a volume large enough to rehouse the next 10 years from 3 million families (if Mr. Wyatt's estimates are correct) to 7 million, if the estimates used in this analysis are correct.

The acceptance of these new methods also would help the industry to cut costs as general price levels drop and thereby would further stabilize the industry. The rehousing market could proceed in times of reduced national income because reduction in handicraft operations at the site would reduce the resistance to lower costs with the general decline in the wholesale index. And with large firms interested in the completed house as distinguished from only small parts of a house, there will be increased interest in the reduction of the prices of materials going into the house, which will cause increased competition for conventional building materials. It would appear possible therefore for private industry to sharply reduce fluctuations in the house building field if enough builders decide it is worth the attempt.

There are other aspects of the industry, aside from its fluctuations and its failure to build to the market. Many of these are covered in other articles in this symposium, and need only to be mentioned here. For instance, there has been a decline in the tendency to build for rent. Newly formed families can rarely afford to buy housing, and even if they could, their housing needs at the time the family is formed are often quite different from what they will be after a few years. The housing needs of a family with children are quite different from the housing needs of most families without children. Consequently, there is a need for the continued production of rental housing. Industry has this problem, and others to master, if we are not to have a different type of housing crisis in the future.

It may appear at first sight that the difference between the estimated commercial market based on Mr. Wyatt's assumption and the estimated market based on the assumption that 1945 incomes are maintained, is so great as to give the industry a strong feeling of uncertainty as to what the market really is. If we assume a 500,000 market for the expansion of population over the long run, and if there is demand for about 200,000 for the rehousing market (under Mr. Wyatt's premise), we have a total demand for approximately 700,000 a year. If we have a demand for 500,000 for rehousing purposes (under the other premise) there is a total commercial demand of a million new houses a year. The difference between 700,000 and a million is nearly 50 per cent. But this is not the dilemma it appears. In the first place, under almost any assumption, there is a current market today for about a million houses a year. Should national income drop and unemployment increase to serious proportions, and should the country resign itself to this situation, the construction industry could read the signs as well as the rest of us and adapt itself to a 700,000 annual market. Should the national income tend to stay up, the con-

struction industry could adapt itself to a million house market. In general, a variation of 5 per cent in the national income, proportionate income going to rent, or in the cost of housing, will affect total demand by about 7 per cent and rehousing demand by about 15 per cent. Industry therefore can watch these figures and can forecast demand within these limits with considerable confidence.

The technique outlined in this study can be used with adjustments, such as allowances for migration, for small market areas, etc. In fact, it cannot be used otherwise. An increase in income which is concentrated in the Far West, for instance, would add little to the market for housing in the Northeast. It might even reduce the demand for housing in the Northeast. Other things being equal, the demand for rehousing will be increased only as the incomes available for housing in a particular area are affected.

If the industry insists in remaining in the handicraft era, we shall continue to have a boom-and-bust psychology, a boom-and-bust industry, and increased government intervention. We cannot remain half employed and half unemployed. If other industries learn to stabilize, or at least to reduce fluctuations, the construction industry will have to learn it too, or accept controls. Examination of the industry and of the environment in which it operates, and acquaintanceship with leaders in the field, leaves me with the conclusion that the industry can change its old habits. Ten years from now a symposium on the subject should not have to include a discussion of the housing crisis in a free economy. Or at least if such a subject is included, the term "crisis" should not bear the connotation it does today. The problem is basically less a problem for economists and government officials than a problem for labor and for businessmen. We believe they can solve it. It is hoped that "government" does not have to.

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